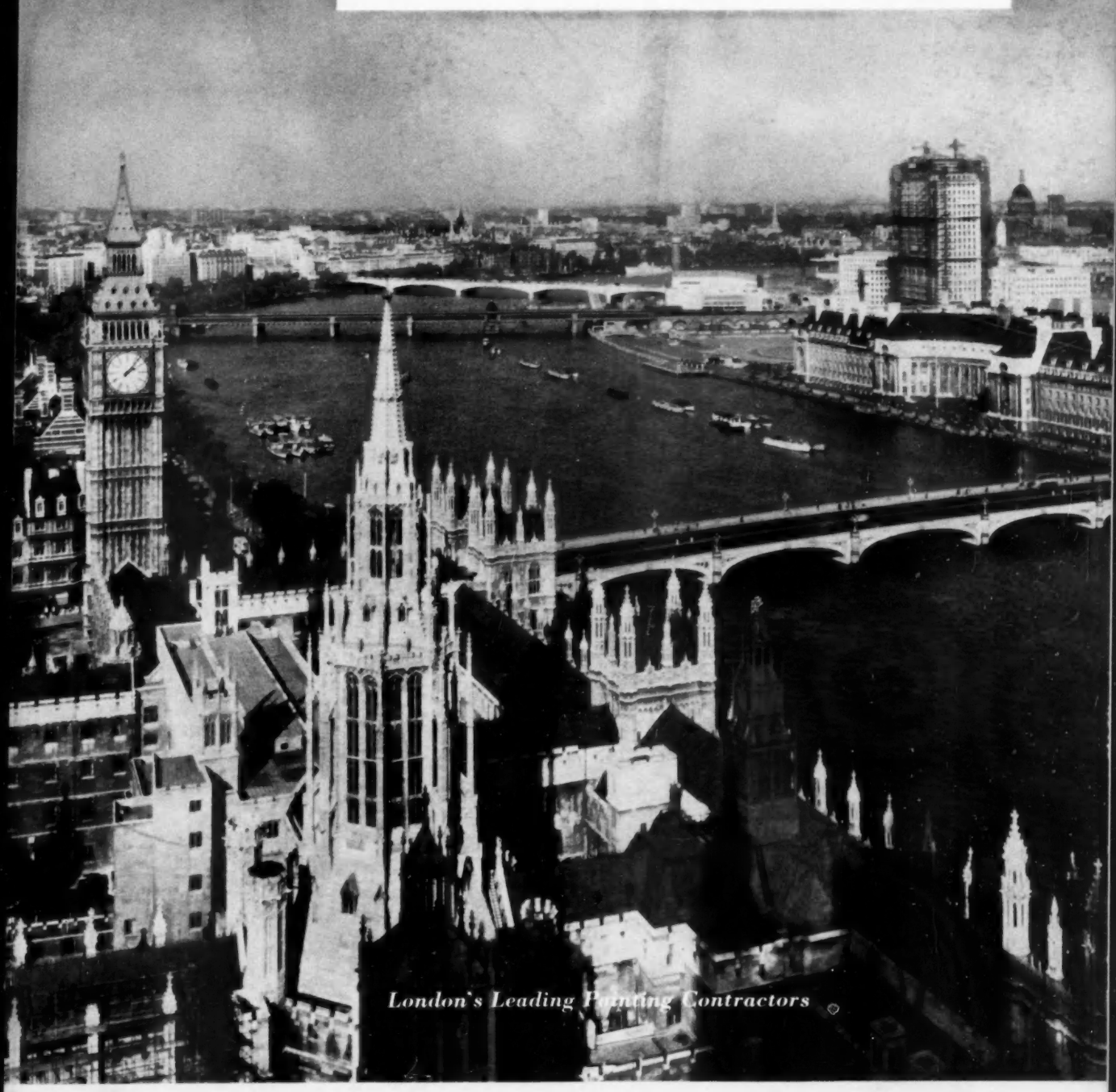
The Builder

A NEWSPAPER FOR THE ARCHITECT AND CONSTRUCTOR

NO. 6156 119TH YEAR. FRIDAY, MAY 12, 1961. Price 1/6.



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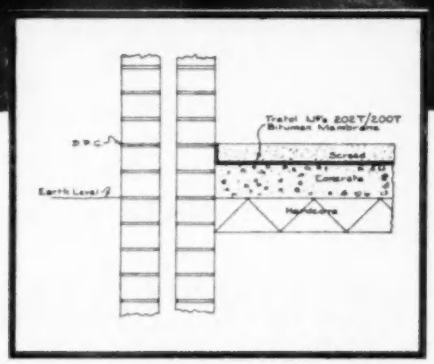

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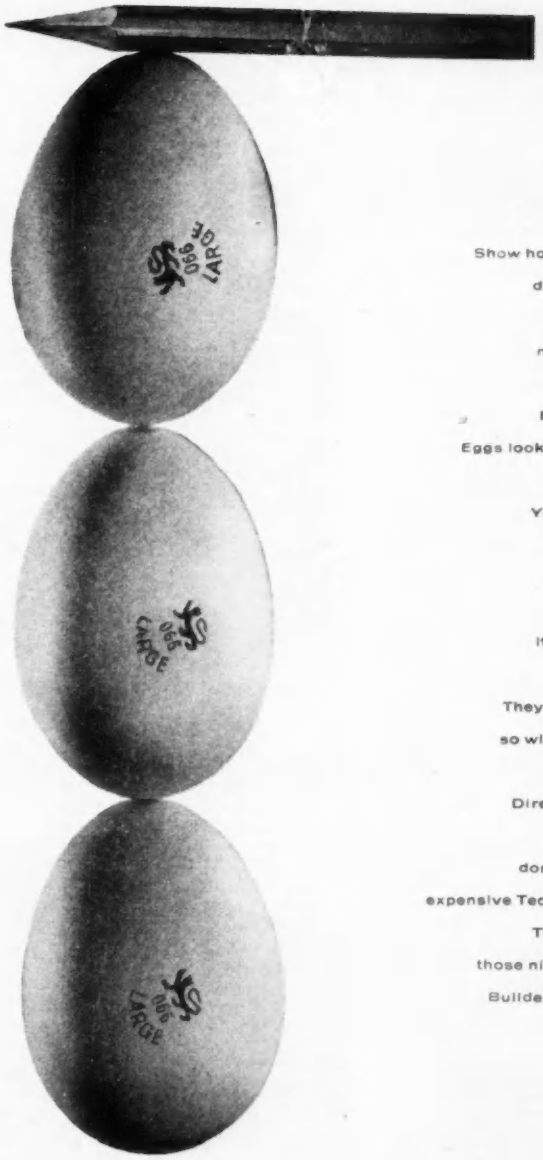

a small
deposit
secures
any
article

. . . new ad. for Builders
said the Client.
Show how Evo-Stik bonds the most
difficult products, how awful
materials look when the
nails and fixings are visible!
Any ideas?
Eggs! said we (the Agency).
Eggs look disgusting nailed together.
The Client looked angry.
You can't teach builders how
to stick eggs, said he.
Builders don't stick eggs!
They could, we replied,
if they read the instructions.
No! roared the Client.
They'll write me stinking letters,
so will the Egg Marketing Board,
and so will our Managing
Director (whom God preserve).
Builders, we said, sadly,
don't write. Not even for these
expensive Technical Instruction Leaflets.
That's why we stopped using
those nice little coupons in the ads.
Builders specify a lot of Evo-Stik,
said the Client.
I rather like Builders.

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Evo-Stik 'Impact' adhesive is a registered trademark.

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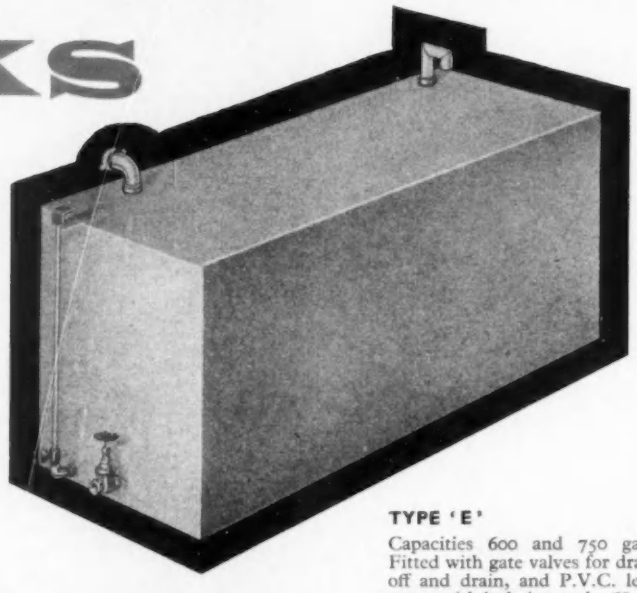
TYPE 'D'

Capacities 175 and 300 galls. Fitted with two gate valves for draw-off and drain, one filler pipe with screwed cap, and vent pipe. PVC. level gauge with isolating cock. Painted externally one coat.



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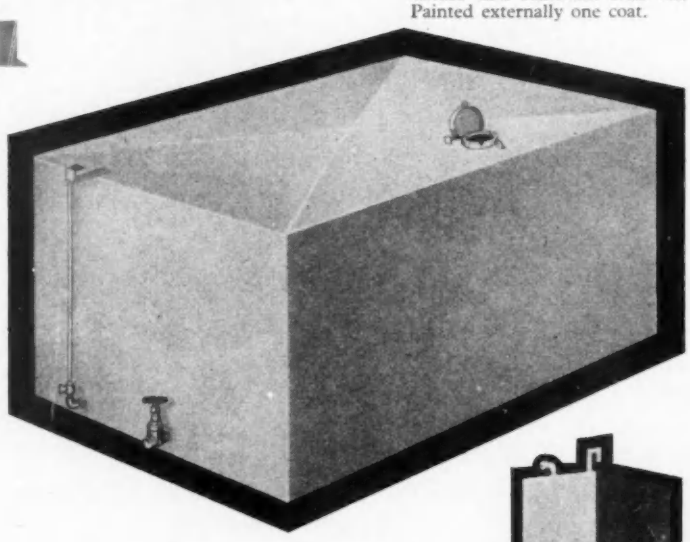
Capacities 600 and 750 galls. Fitted with gate valves for draw-off and drain, and P.V.C. level gauge with isolating cock. 6" dia. combined fill and vent with hinged cover. Top tented to ensure that rainwater runs off. Painted externally one coat.

for Domestic Fuel Oil



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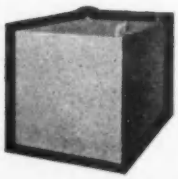
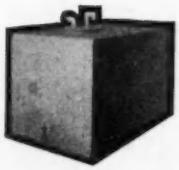


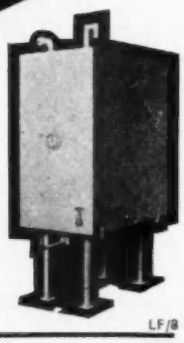
TYPE 'B'

Capacities 650 and 800 galls. Fitted 18" dia. manhole with bolted cover and joint ring, two gate valves, filler and vent pipes and indicator, painted externally one coat.



TYPE 'A'

Capacities 175 and 300 galls. Fitted with two gate valves, filler and vent pipes and indicator. Mounted on mild steel angle stand and painted externally one coat.



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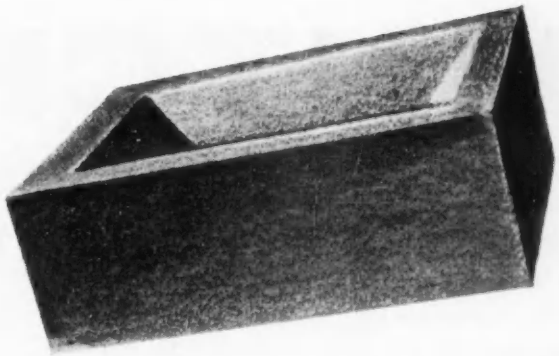
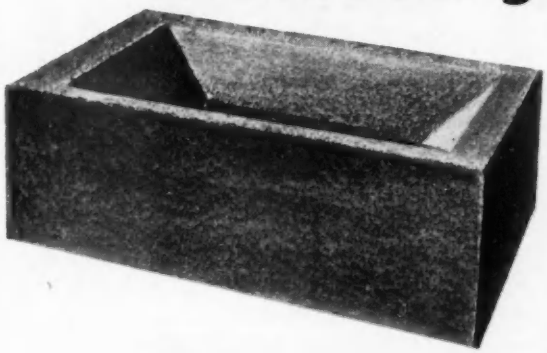


Between you and me ...



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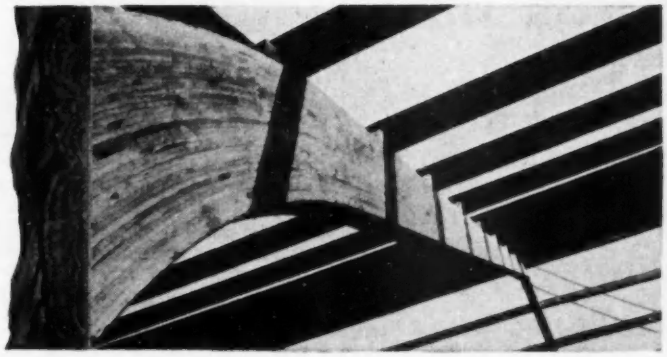

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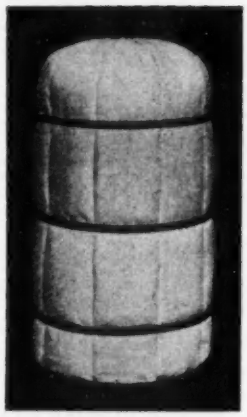

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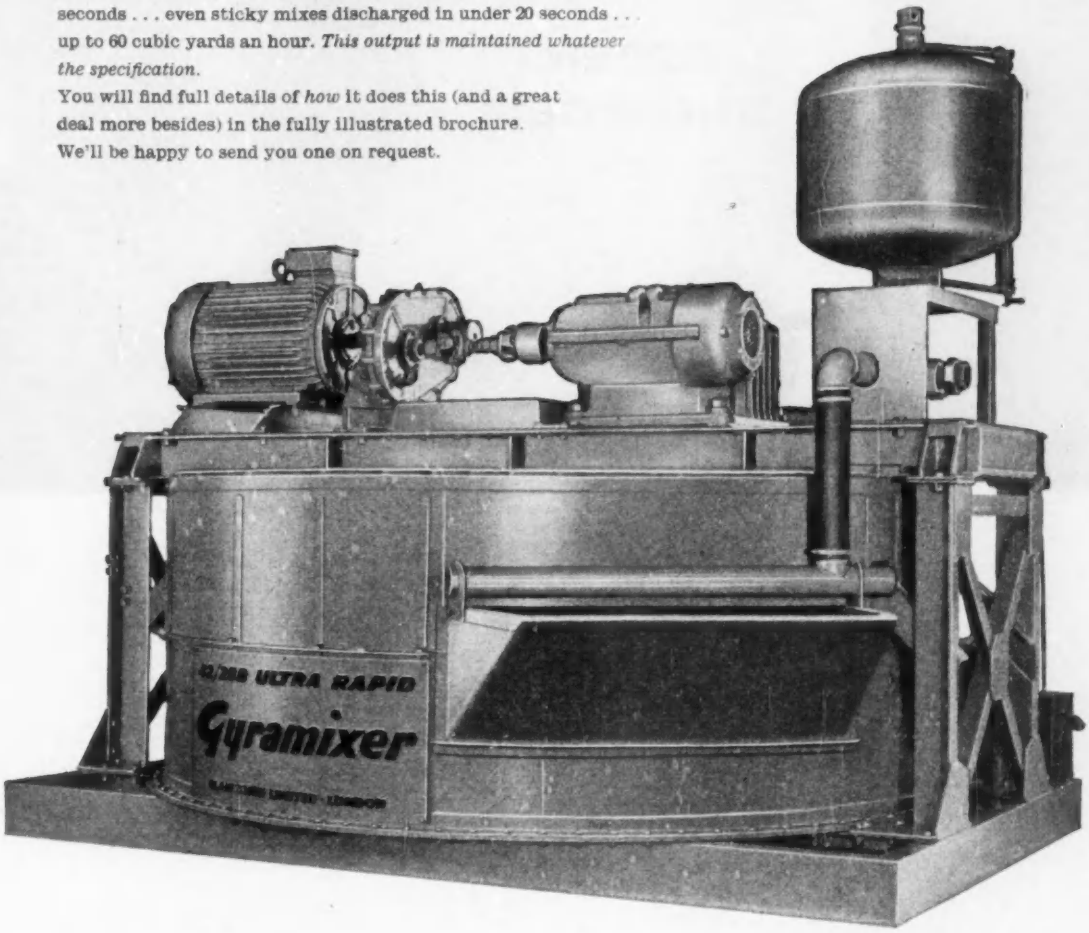

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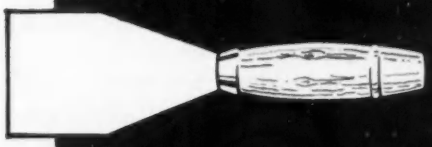

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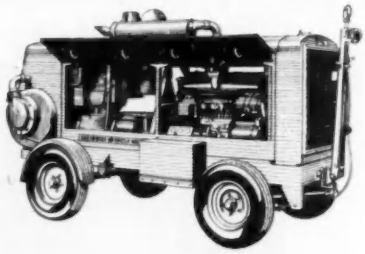

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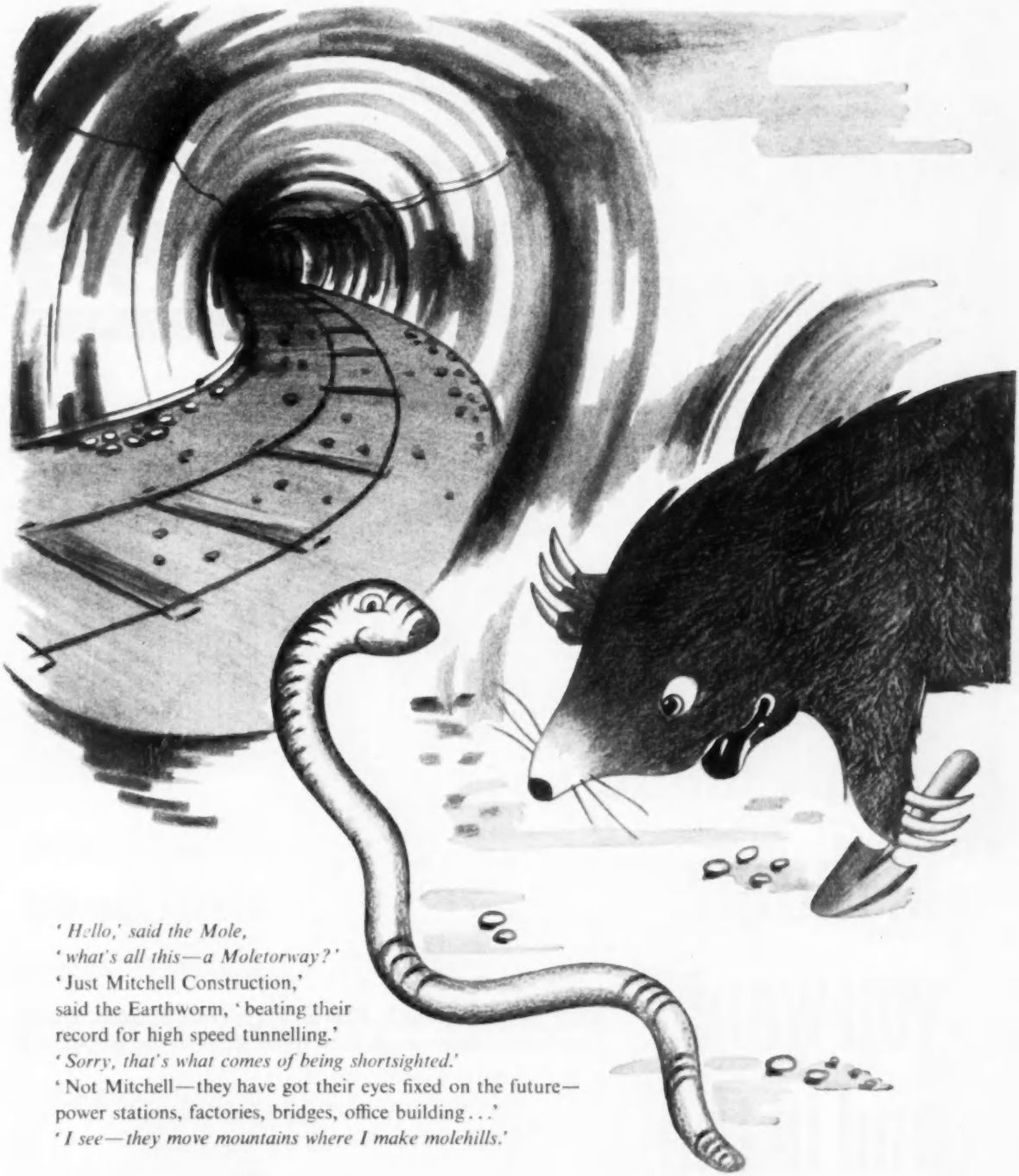

'Hello,' said the Mole,
'what's all this—a Moletorway?'
'Just Mitchell Construction,'
said the Earthworm, 'beating their
record for high speed tunnelling.'
'Sorry, that's what comes of being shortsighted.'
'Not Mitchell—they have got their eyes fixed on the future—
power stations, factories, bridges, office building...'
'I see—they move mountains where I make molehills.'

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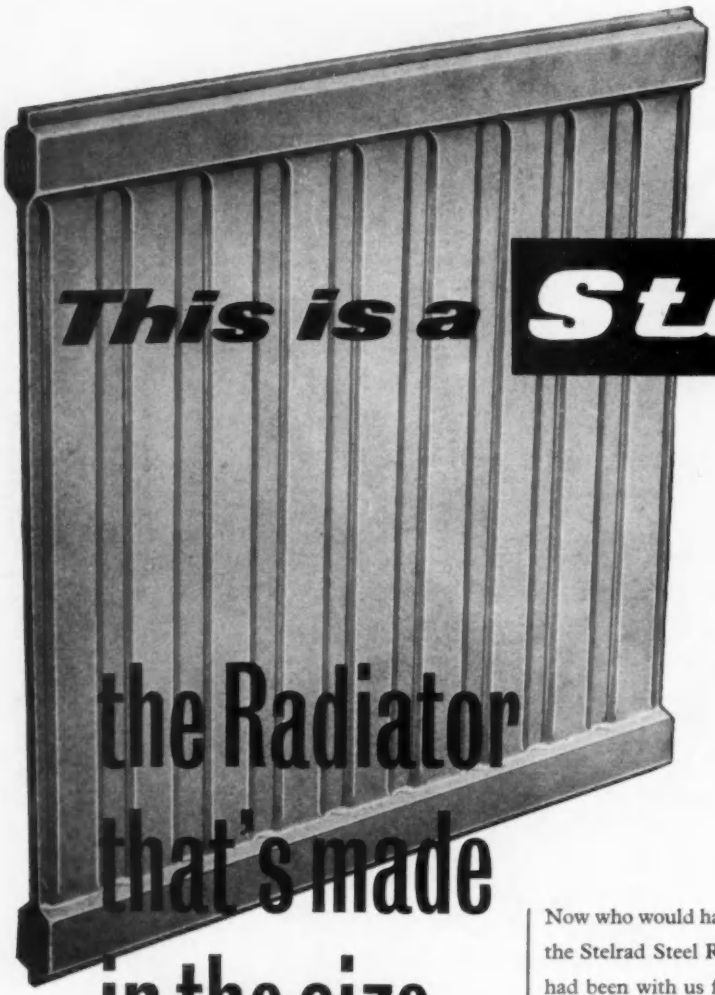
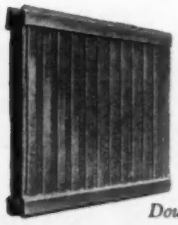
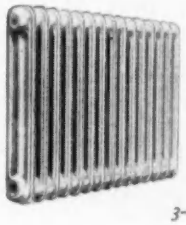




Double Wall

This is a Stelrad

Angle-Wall



3-Column

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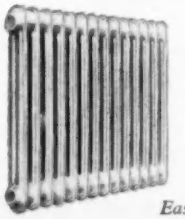

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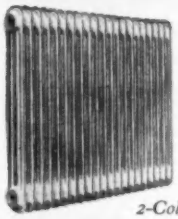
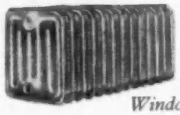


2-Column



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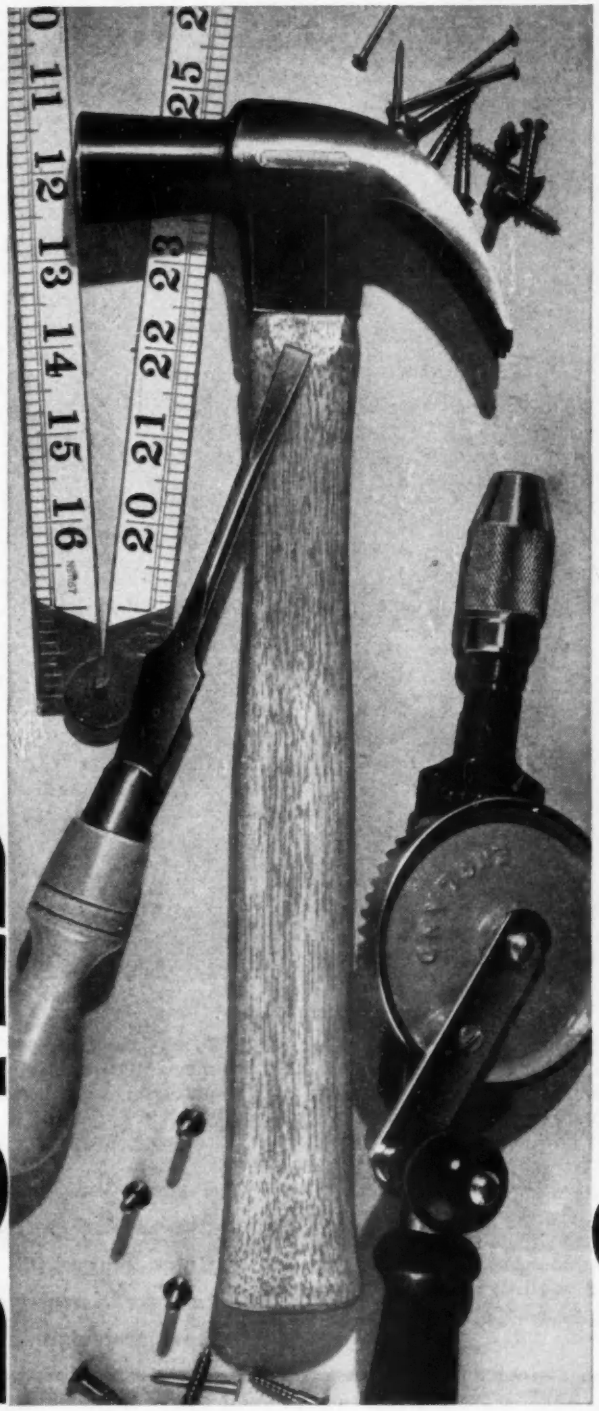

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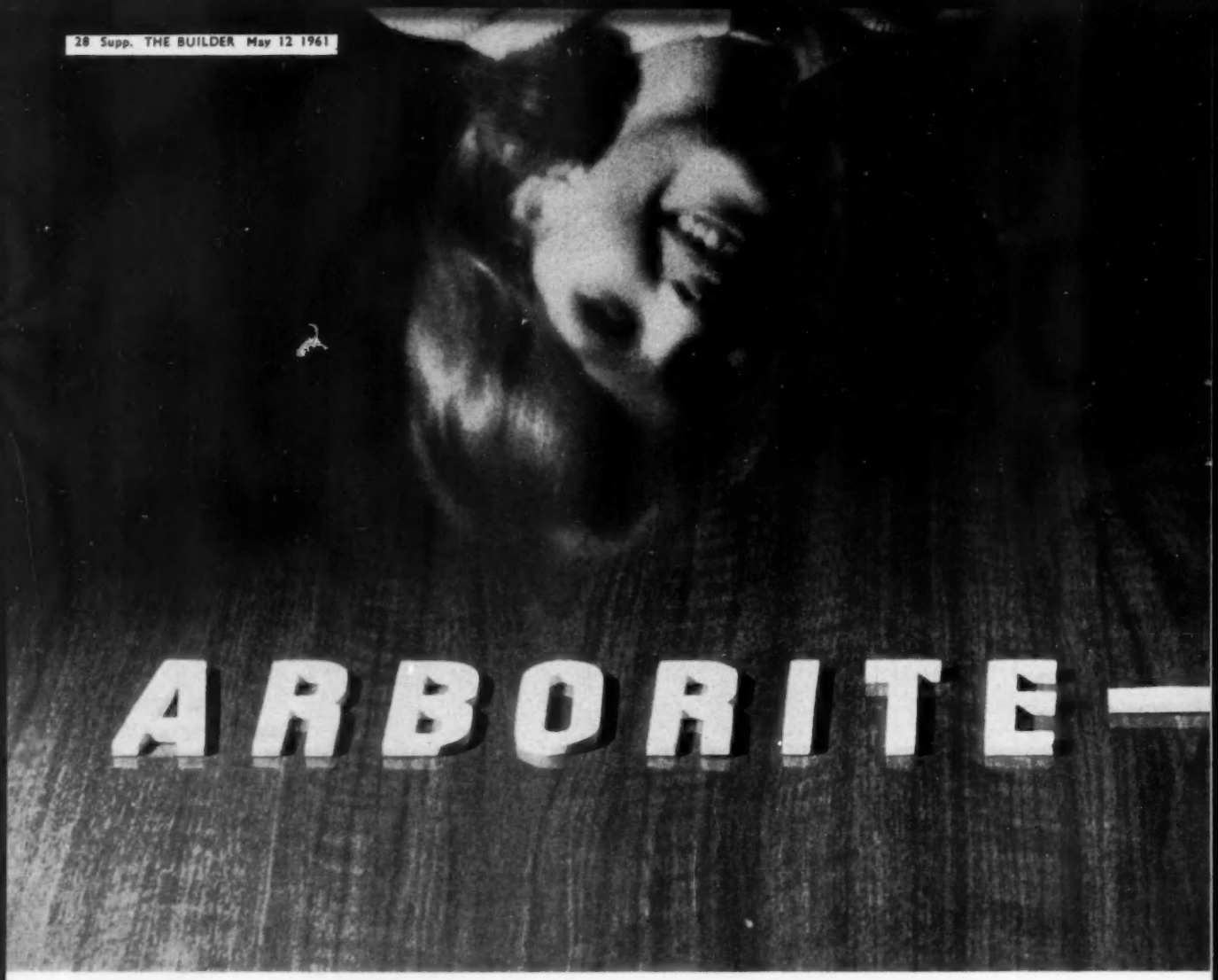

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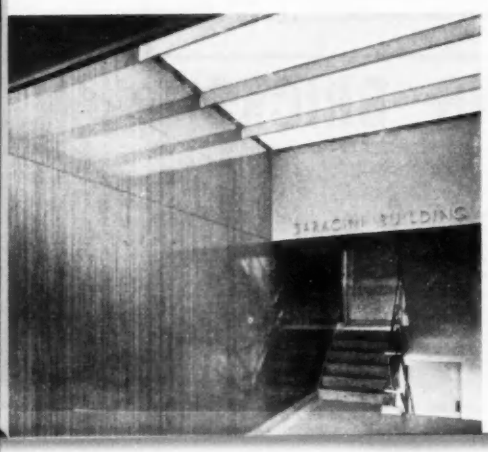

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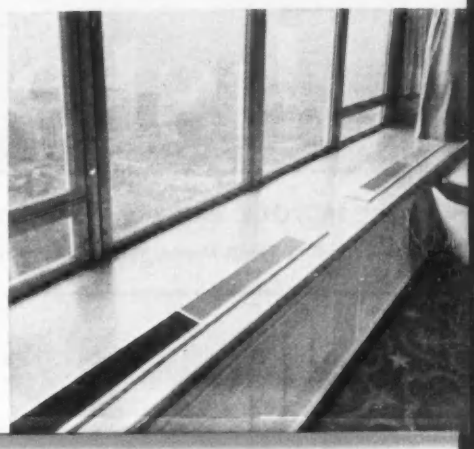

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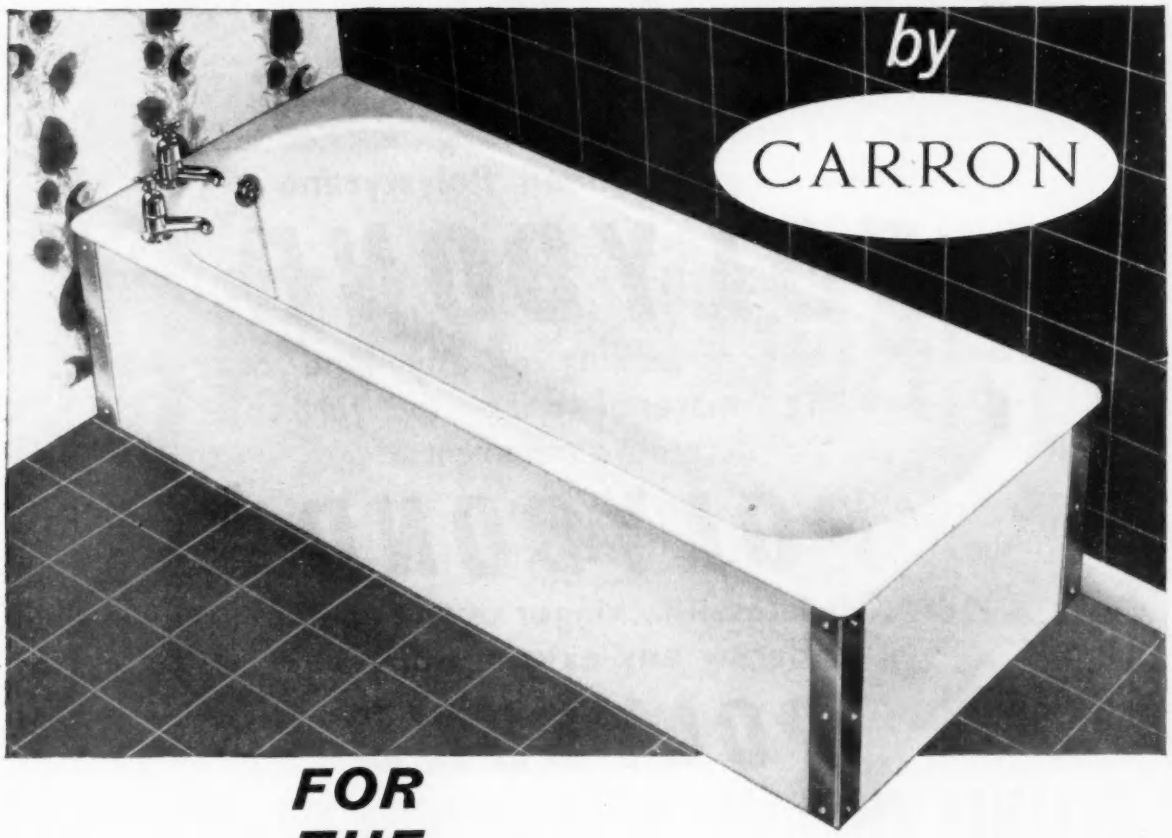

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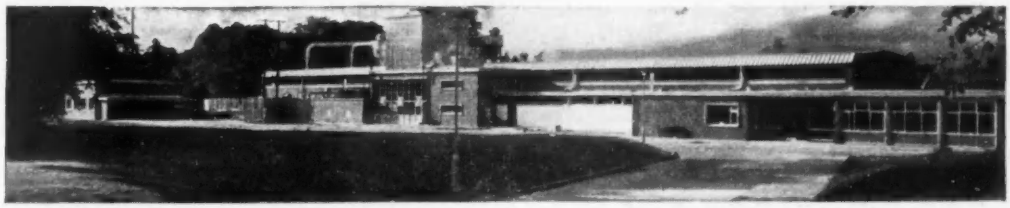

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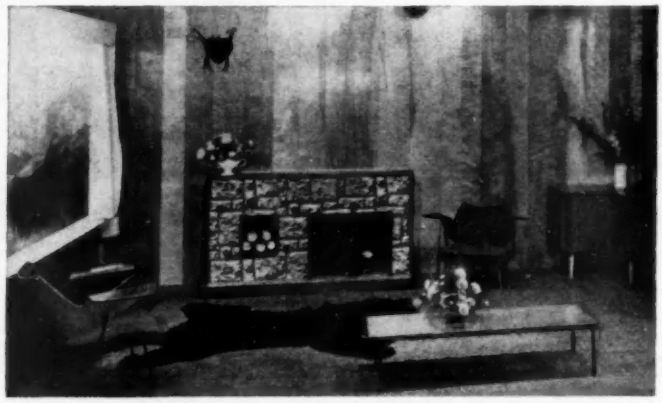

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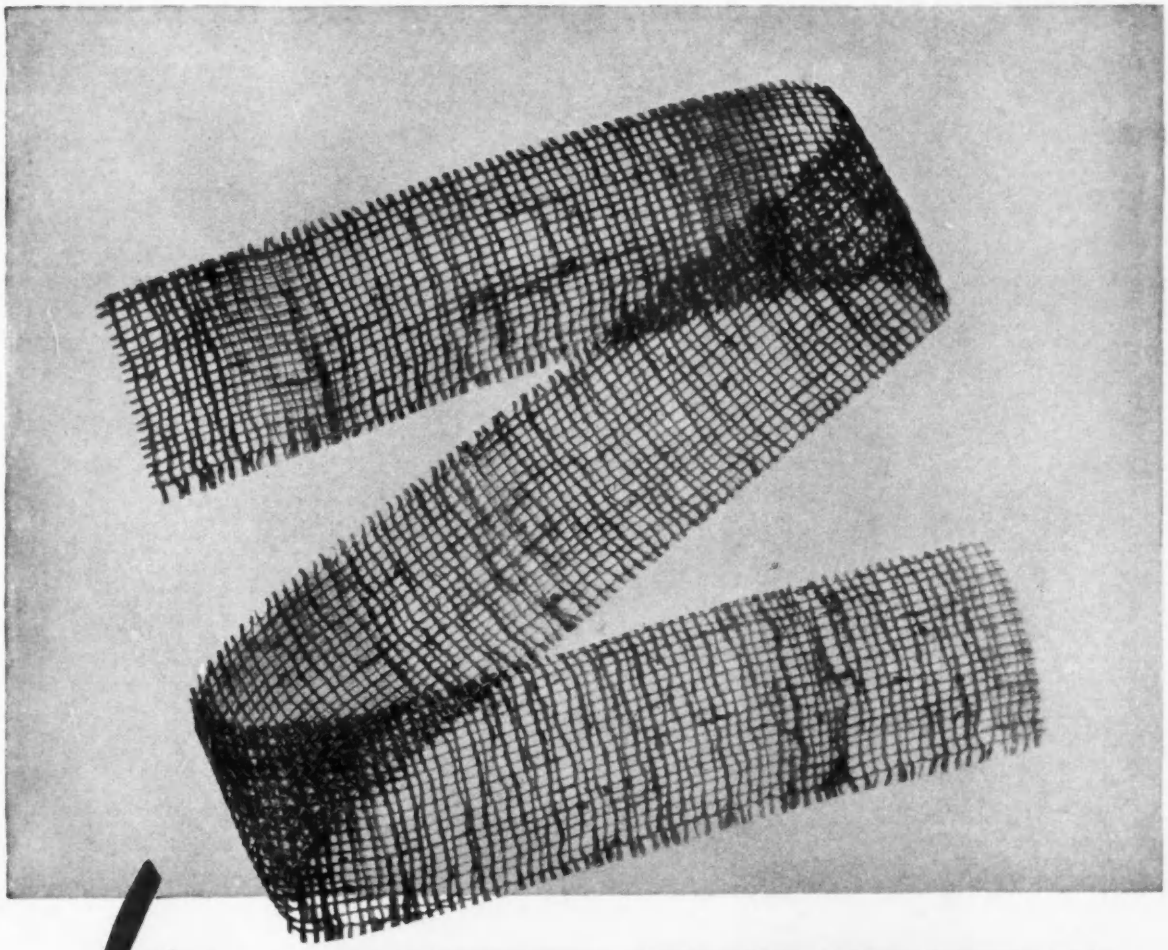

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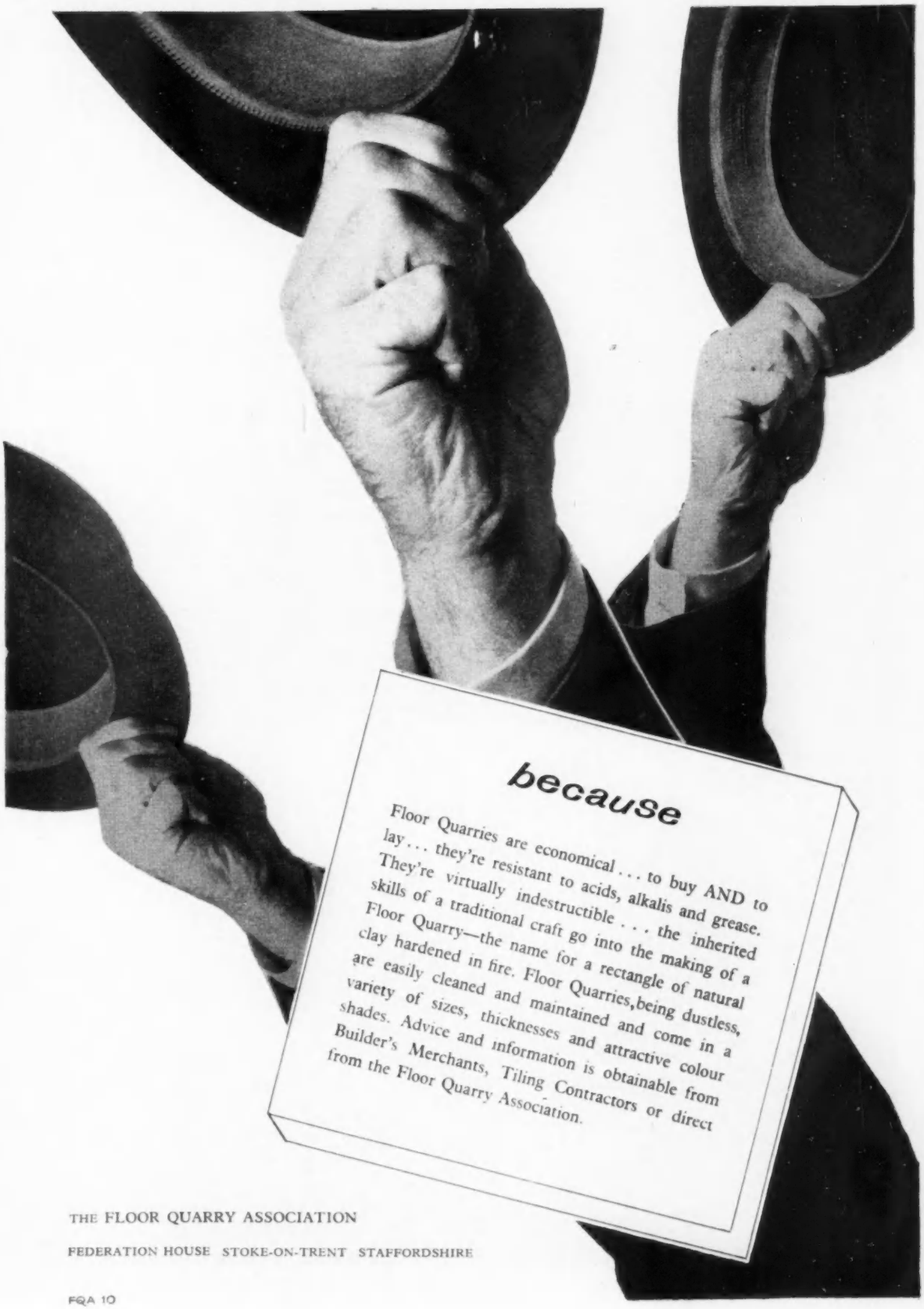

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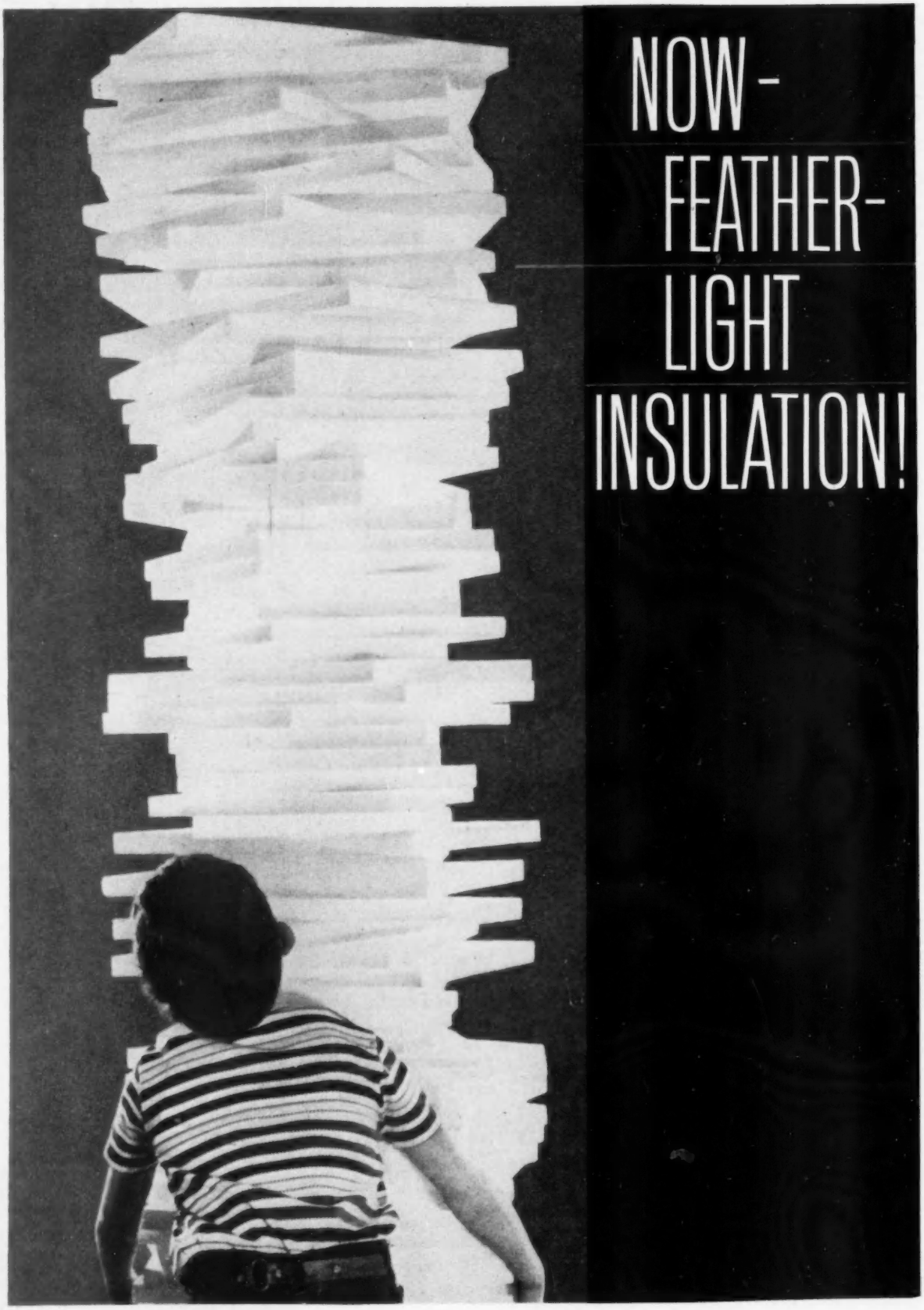
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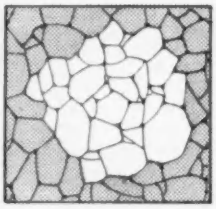

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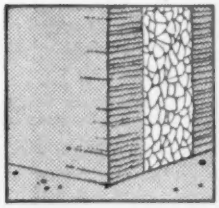

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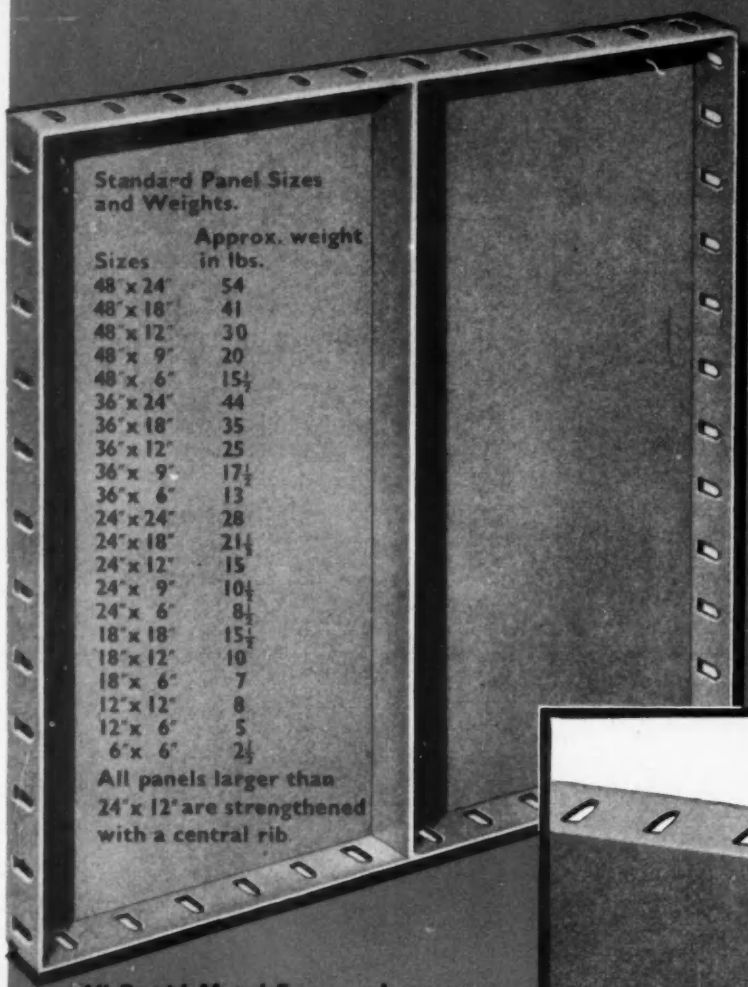

Standard Panel Sizes and Weights.

Sizes	Approx. weight in lbs.
48" x 24"	54
48" x 18"	41
48" x 12"	30
48" x 9"	20
48" x 6"	15½
36" x 24"	44
36" x 18"	35
36" x 12"	25
36" x 9"	17½
36" x 6"	13
24" x 24"	28
24" x 18"	21½
24" x 12"	15
24" x 9"	10½
24" x 6"	8½
18" x 18"	15½
18" x 12"	10
18" x 6"	7
12" x 12"	8
12" x 6"	5
6" x 6"	2½

All panels larger than 24" x 12" are strengthened with a central rib

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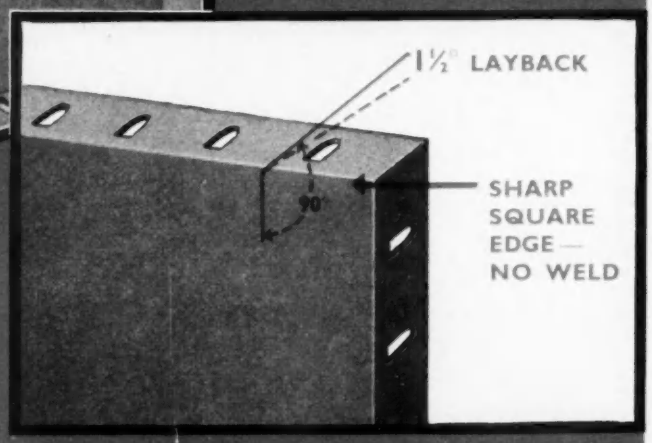

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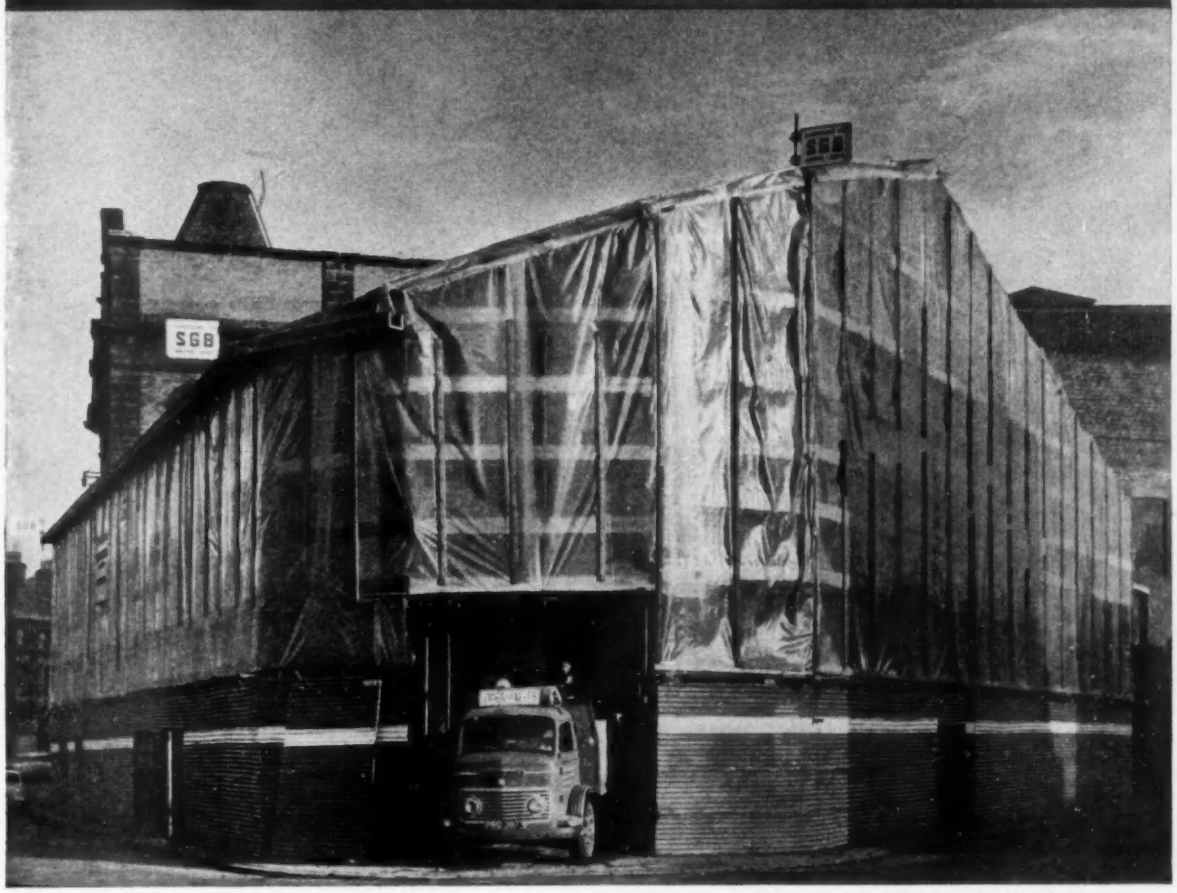

A temporary weatherproof structure clad with 'Visqueen' polythene building sheet over extensions to the Locarno Ballroom, Liverpool, for Mecca Ltd.
Contractors: James Crosby & Sons Ltd.
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'Visqueen' is readily adaptable to varying site conditions. This structure was made by fixing timber members horizontally to scaffolding, placing the 'Visqueen' in position and battening it to the supporting timbers by nailing through at regular intervals to distribute the tension on the sheeting evenly.

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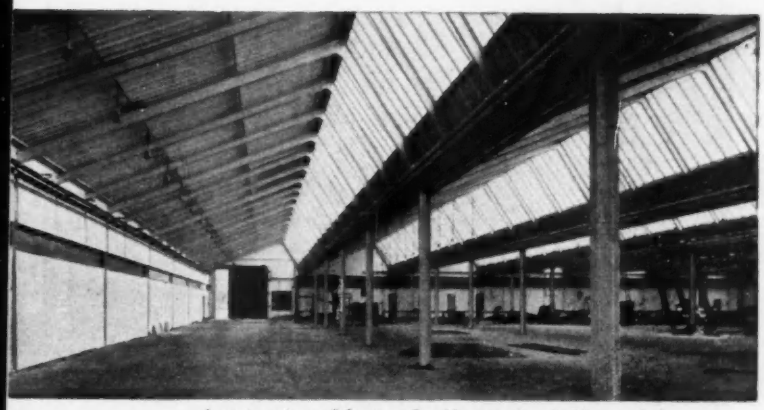

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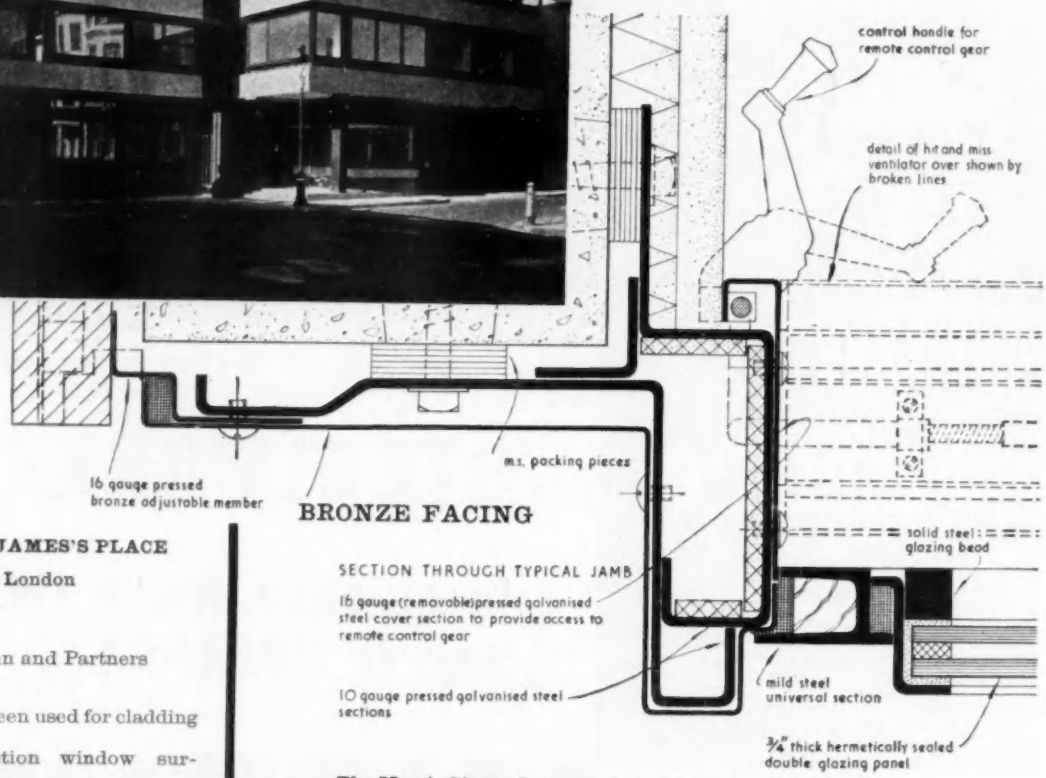

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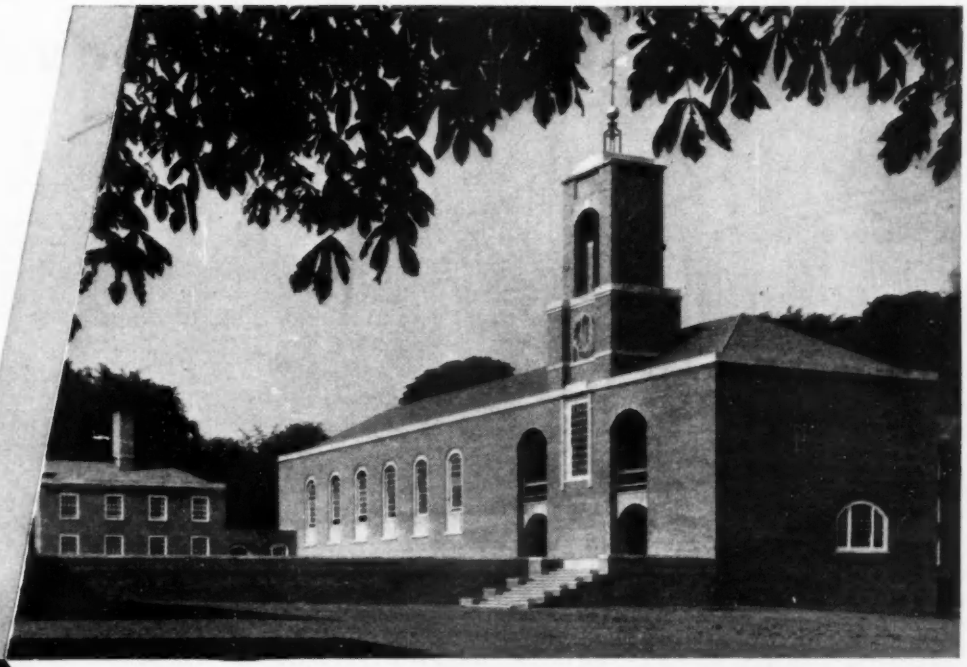

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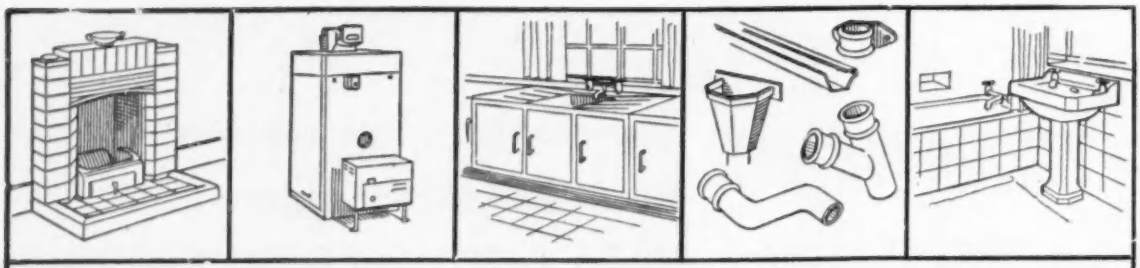

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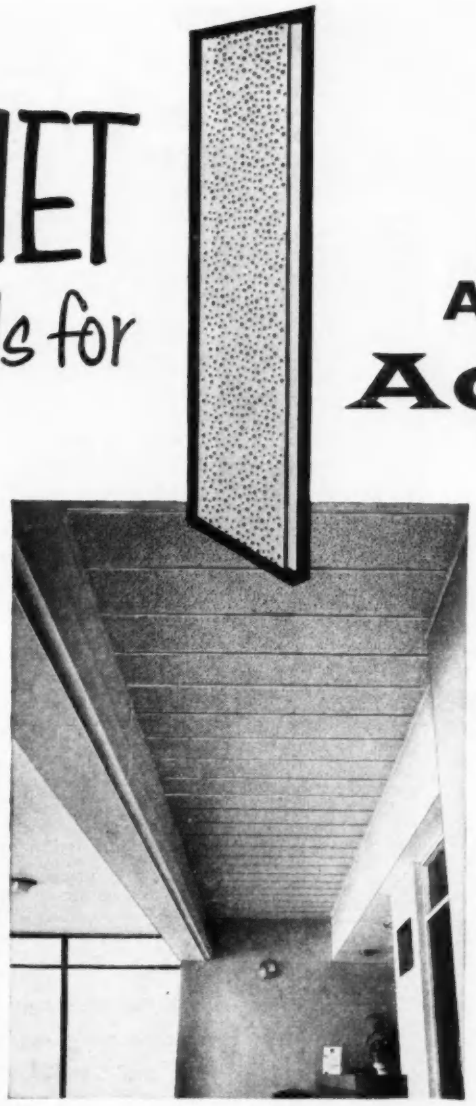

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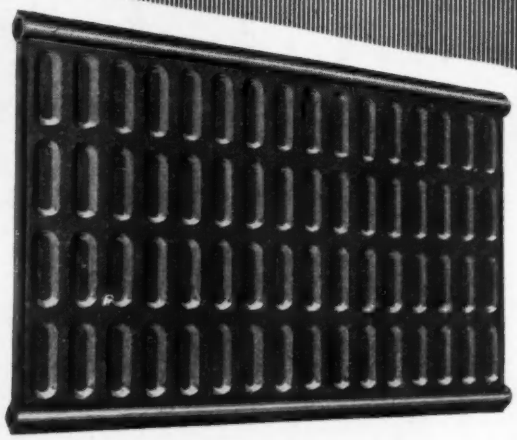

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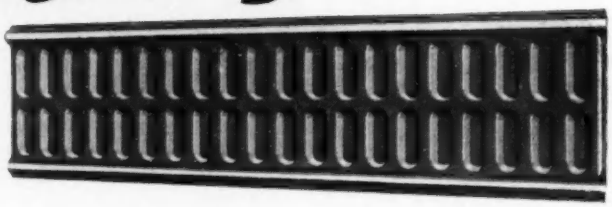

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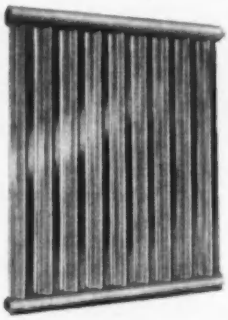

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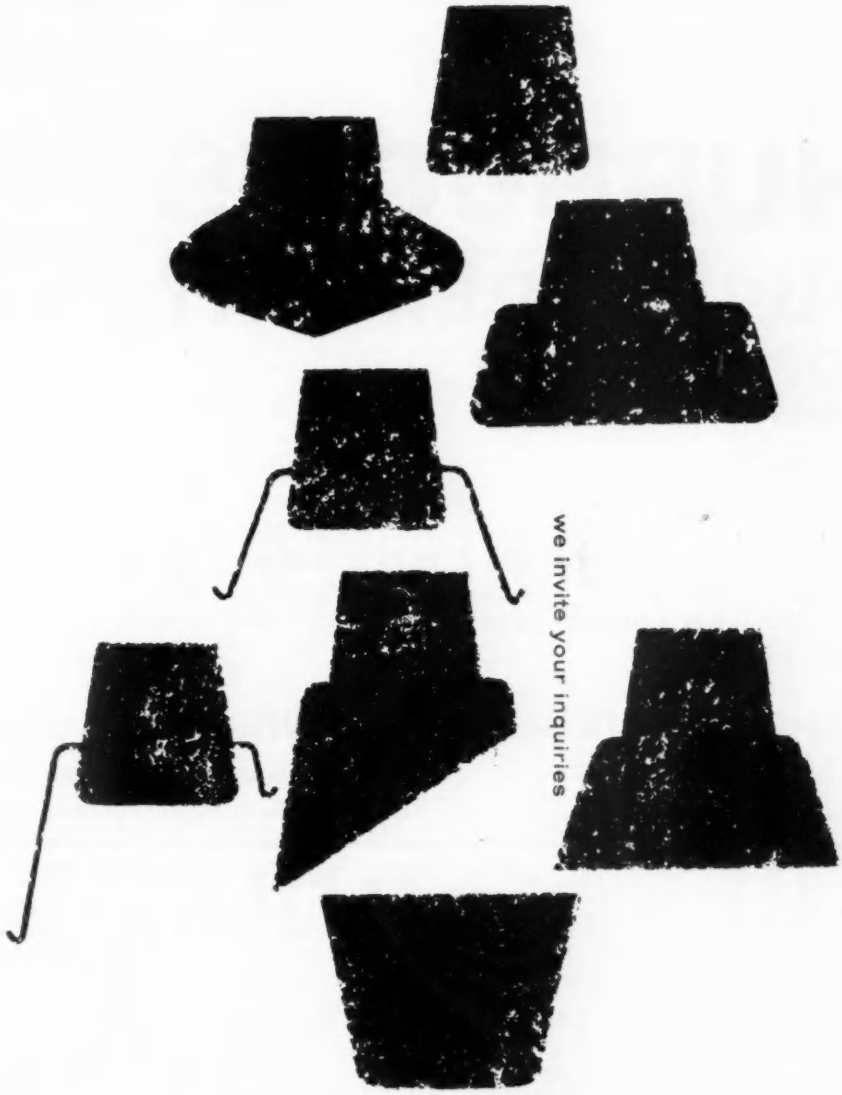

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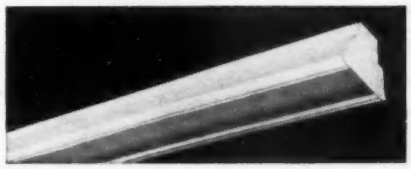

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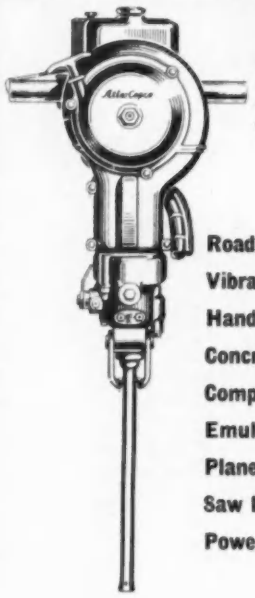

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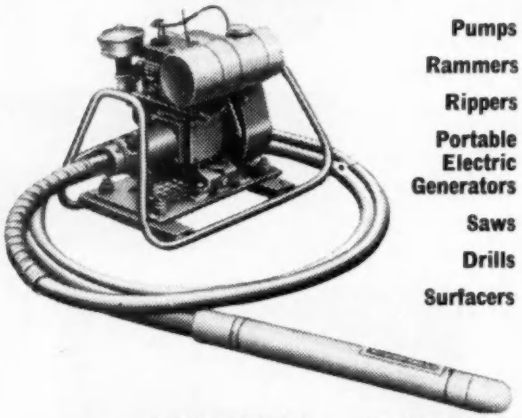

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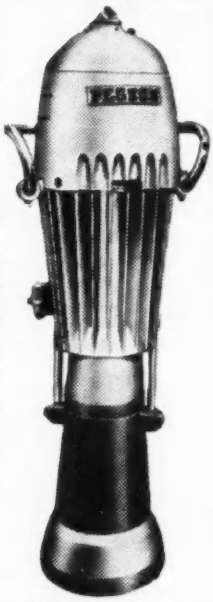

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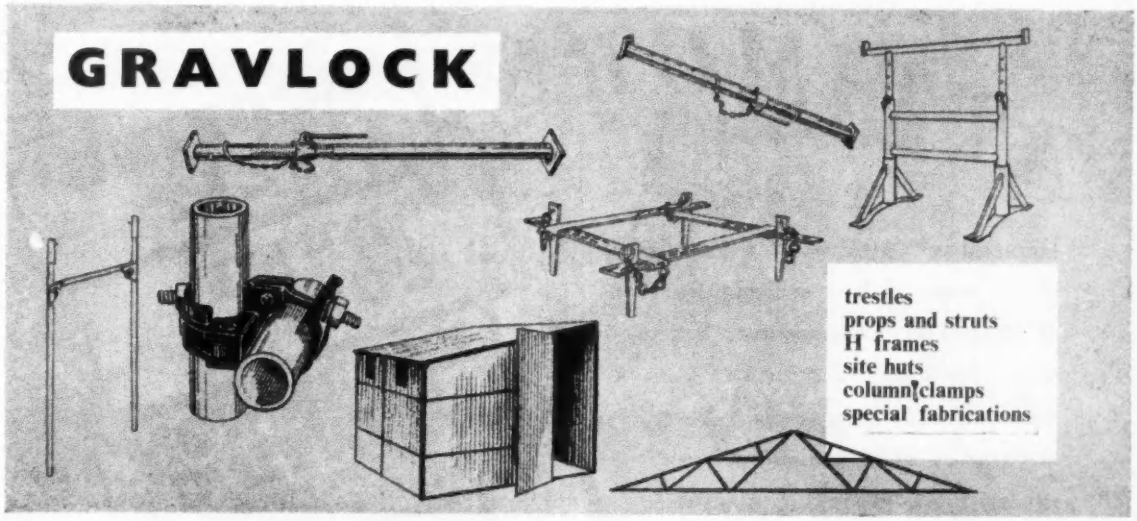

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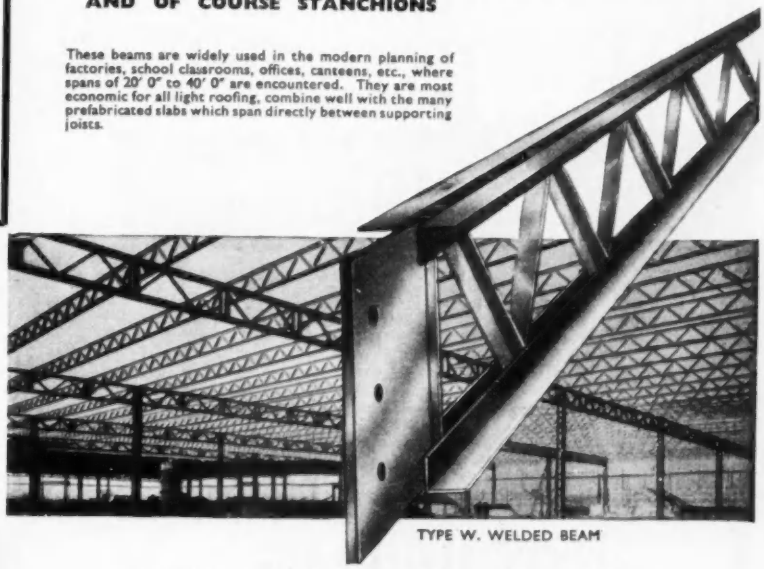

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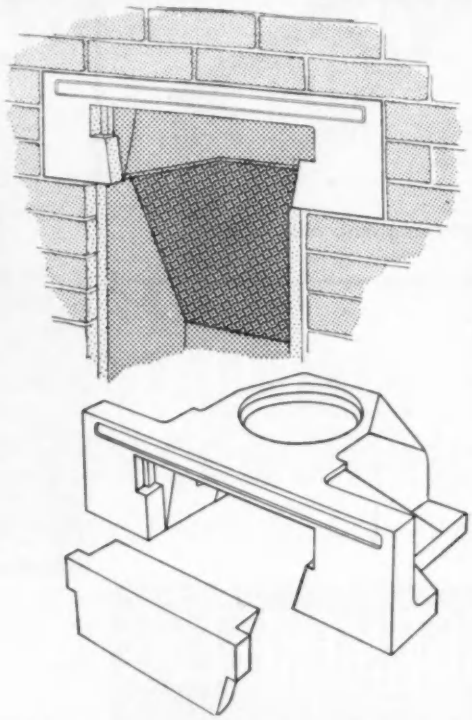

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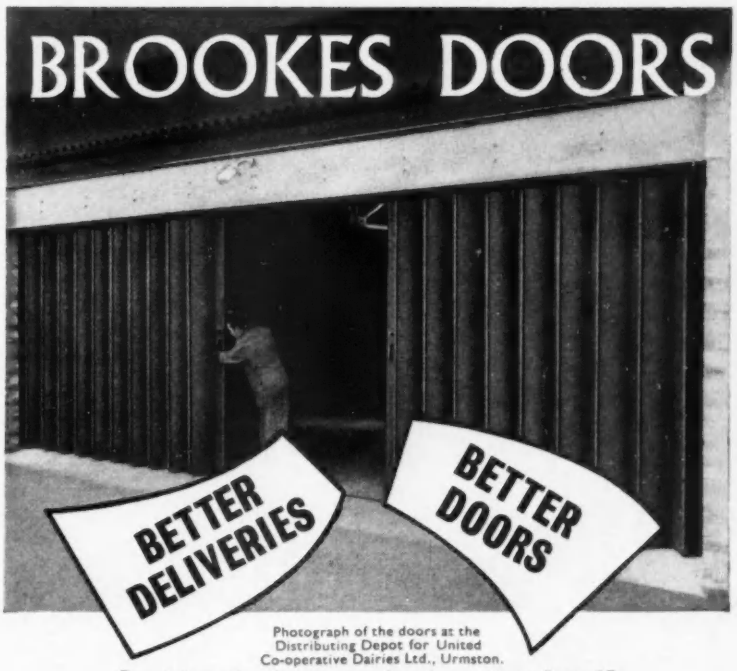

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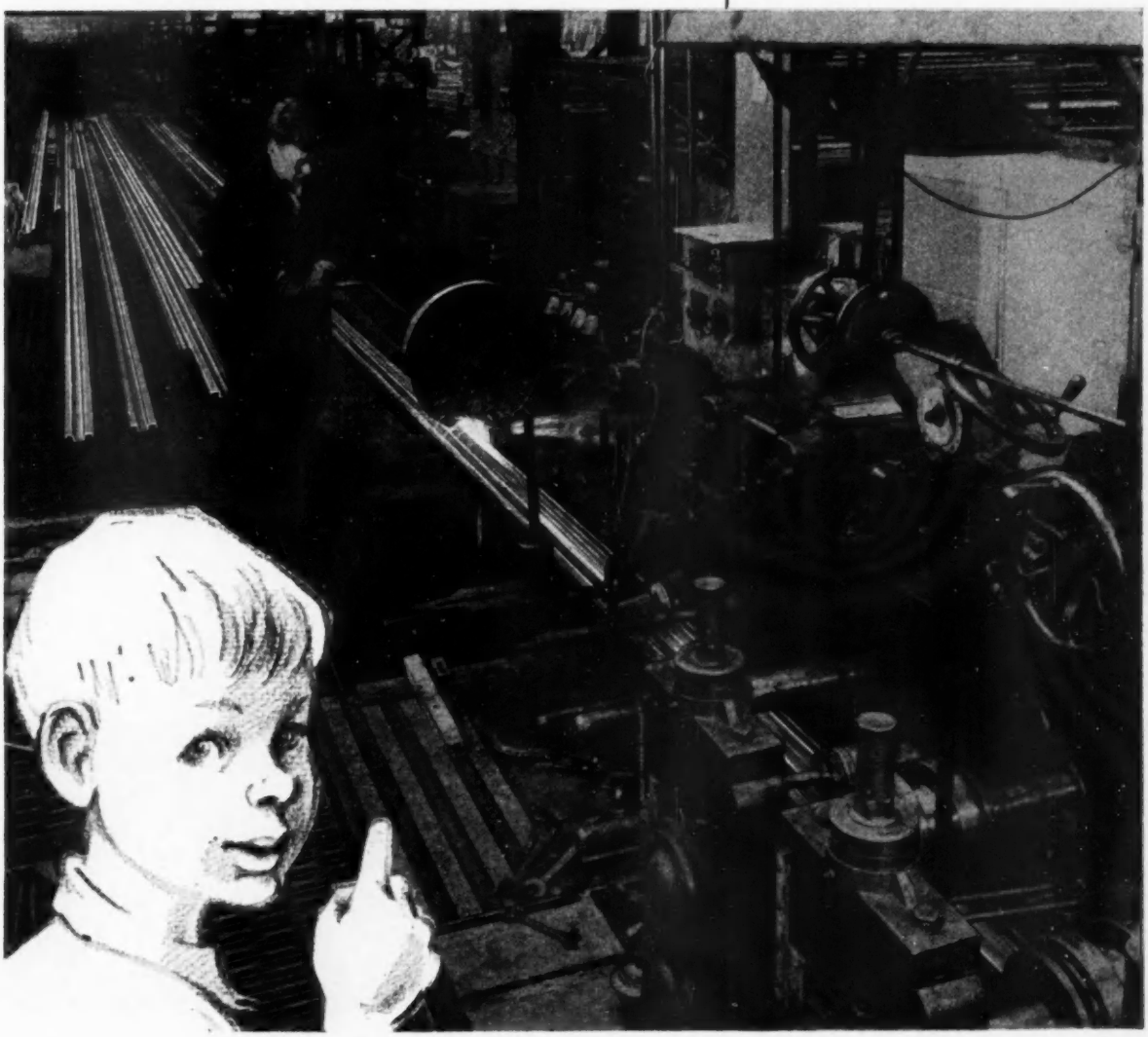

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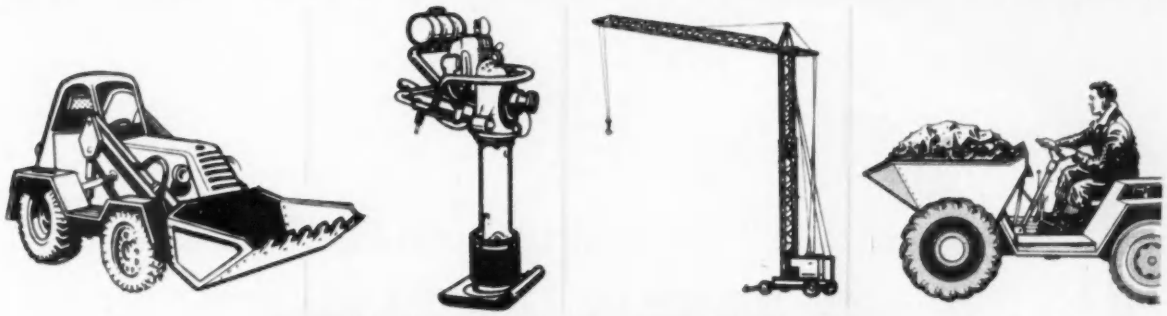

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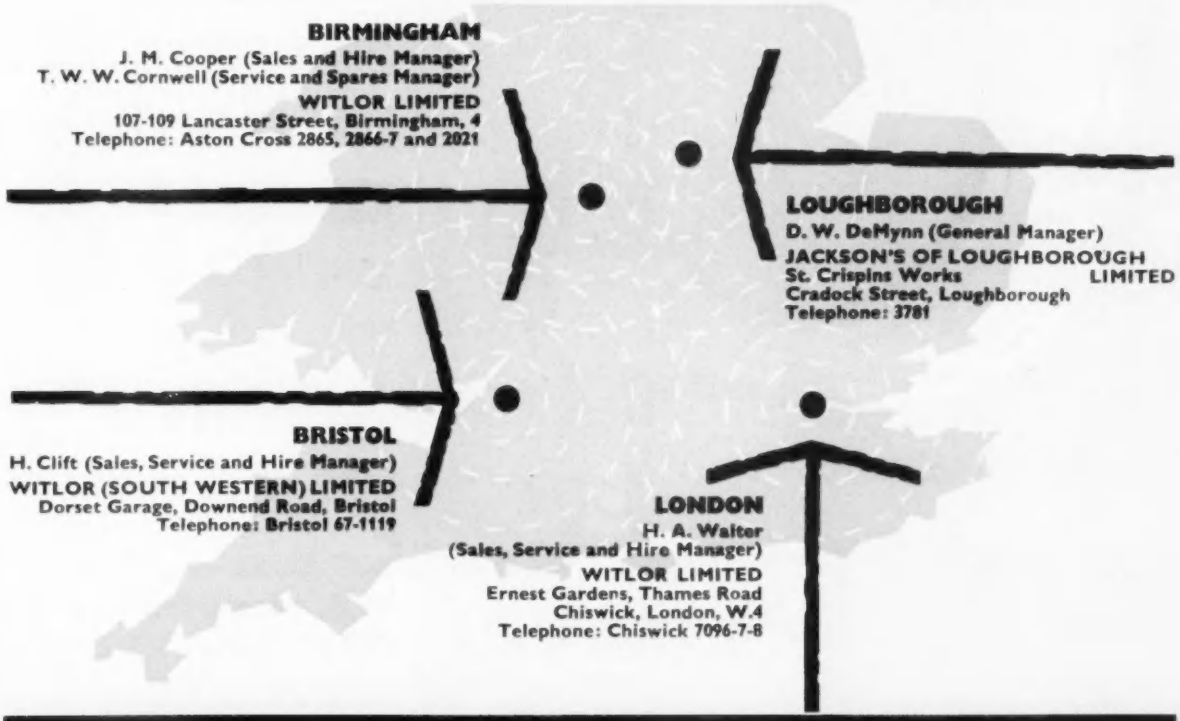

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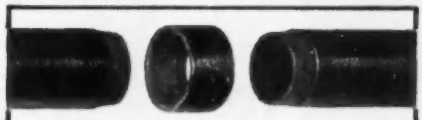

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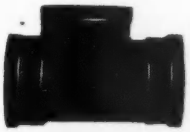

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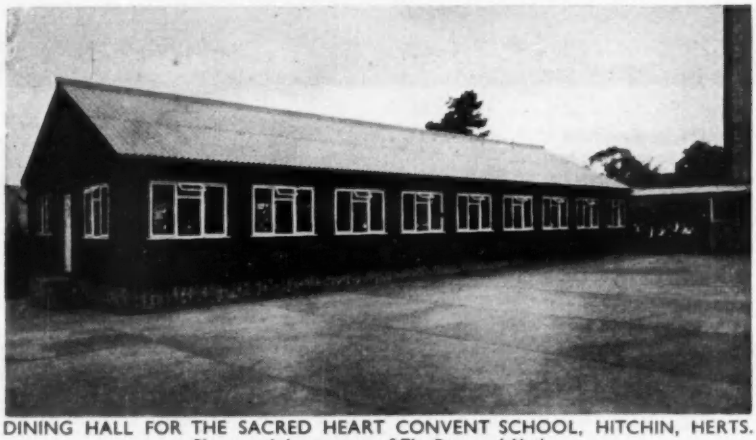

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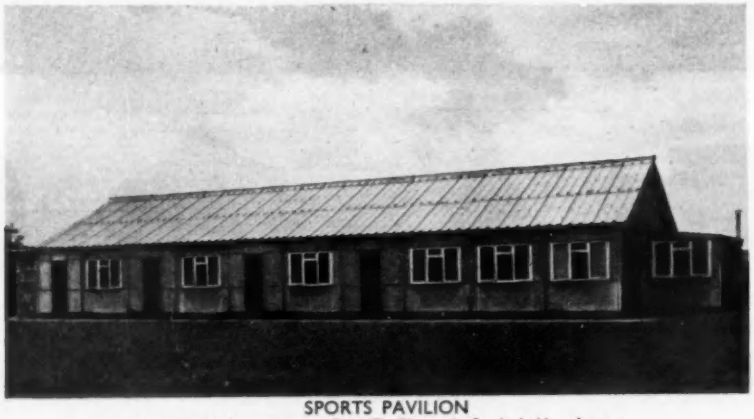

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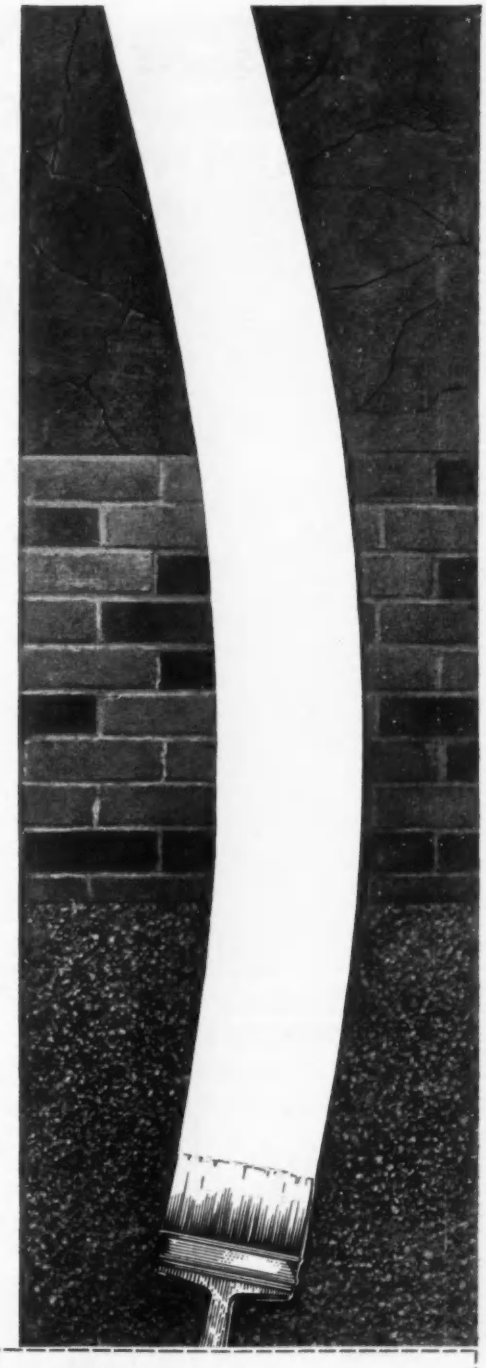

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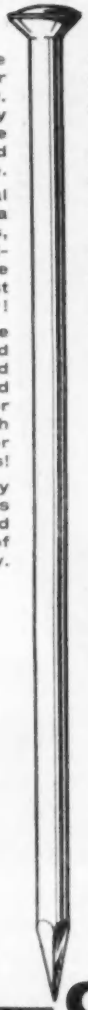

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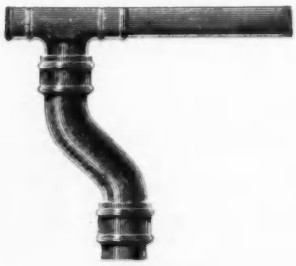

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News Summary

889 Recent American methods that have been introduced with the object of cutting the cost of working drawings are the subject of a special article by Mr. W. Tatton-Brown.

892 Revised scales of fees for state-aided housing have been introduced by the RIBA.

901 Liverpool School of Architecture is featured in a review and illustrations of fourth and fifth year students' work in the first supplement of a monthly series.

907 As part of the work of raising the status of the professional engineer members of chartered engineering institutions should call themselves simply 'Chartered Engineers', the President of the Institution of Structural Engineers suggested.

907 A 'Spiderman' who was injured while working on a power station was subjected to 'unnecessary and unjustifiable' risks in being required to use a 'Spanish windlass,' said Lord Morris in the House of Lords.

908 A firm plan for five years ahead was as far as possible the intention of the Government in their hospital building programme, the House of Lords was told.

909 The cost per unit of accommodation in a tall block of flats was not now so far above the cost per unit of accommodation in a house or a 3-storey block of flats as it was a few years ago, the Housing Minister told the Commons.

909 Regional hospital boards have been told by the Minister of Health to accept tenders within two months of submission.

910 Following a discussion at the Ministry of Housing and Local Government, Bournemouth Corporation are to recommend that the question of the declaration of councillors' pecuniary interests should be taken up by the AMC.

'Late News' will be found overleaf, and 'News of the Week' on page 899

Late News

RIBA Council Nominations

THE NOMINATION LIST of candidates for the RIBA Council closed on Tuesday night. Following is the list of candidates nominated for election by 7 or more members:

H. K. Ablett (F), G. R. Adamson (A), J. C. Barker (F), E. G. Dodds (A), G. H. Lawrence (A), J. J. Mackay-Lewis (A), G. B. Oddie (A), F. T. Orman (F), J. R. Parker (A), C. E. Pearson (F), D. Stokes (F), L. G. Vincent (A), R. T. Walters (A), B. R. Ward (F), D. B. Waterhouse (A), B. P. Westwood (F), and Edwin Williams (F).

RIBA By-laws

AT A special general meeting of the RIBA on Tuesday night, the by-laws as revised were adopted with an amendment to by-laws 57 and 59 which concern the majority required to carry a resolution by a special general meeting. This will be 'by a four-fifths majority of those present and entitled to vote.' A report of proceedings will be given next week.

RIBA Town Planning Awards

THE RIBA AWARD for Distinction in Town Planning has been conferred on Sir Basil Spence, RA, P-PRIBA, and Mr. Percy Johnson-Marshall, ARIBA.

IoB North-Western Branch

MR. T. V. PROSSER, FIOB, past-President NFBTE, was on Monday elected chairman of the newly formed North-Western branch of the Institute of Builders in Manchester.

Chichester Theatre Contract

A CONTRACT for the erection of the new Festival Theatre, Chichester (a perspective of which was shown in 'The Builder' of February 12, 1960) has been awarded to Sir Robert McAlpine & Son, Ltd. The price was £95,000 and the theatre is to be completed in 10 months. Architects are Powell & Moya, of Great Smith-street, SW1; consulting engineers Charles Weiss & Partners; consulting electrical engineers Peter Jay and Partners; and quantity surveyors, Davis, Belfield & Everest. The foundation stone is being laid today (May 12) by Princess Alexandra.

Plan for Smithfield Site

REDEVELOPMENT of the Smithfield site at the junction of Farringdon-road and Charterhouse-street is proposed in a joint enterprise by the City Corporation and Tower Securities Ltd. The City's proposals, to cost £345,000, include retail market and a range of two-storey factory and store buildings. Tower Securities, whose architects are R. Seifert and Associates, of 28 Gt. Ormond-street, London, WC, proposes a six-storey commercial building costing about £¼m. The plan was to be considered by the Court of Common Council yesterday (May 11).

The Builder

INCORPORATING ARCHITECTURE & THE BRITISH ARCHITECT

Vol. CC. May 12th 1961 No. 6156

Published from 'The Builder' House, 4 Catherine-street, Aldwych, London, WC2. Telephones: Temple Bar 6251-4.

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Leading Article

New Fees for Old

'THE RIBA SCALES OF FEES for State-Aided Housing Schemes and for State-Aided Multi-Storey Flats have been withdrawn by the RIBA Council.' This is the opening sentence of the Explanatory Notes included in the new RIBA booklet entitled 'Applications of the RIBA Scale of Professional Charges to Repetitive Housing' announced on page 892 of this issue. It is a statement which many architects will greet with sighs of long-awaited relief. It comes at the end of long years of hardship and patient suffering for those architects who have carried the burden of house design, layout and supervision for local authorities since the war under the old scale of fees, often at financial loss which they were only able to carry by subsidy from other work in their offices paid for at the standard rates.

The new document, which is apparently to be known under the abbreviated and therapeutic-sounding title of 'The Application,' sets out the modifications of the standard scale which may be allowed for repetitive work. The circumstances in which the modifications apply and the amount of the reductions permissible are reasonable and proper, and it is unlikely that any architects will wish to quarrel with them. The terms in which the document is written are clear and precise, and the whole tenor of the new pronouncement has an authoritative ring which should hearten those architects who have felt the need for stronger backing and support from their professional headquarters in explaining their charges to parsimonious clients.

Housing before the war was the Cinderella of local government enterprise. To-day the local authorities are our biggest landlords and own the majority of houses built since the war. The peak effort of over 300,000 dwellings a year was a valiant achievement and one of which both councillors and architects alike can be proud. All around us great new housing developments, neighbourhood units and new towns—all comprising state-aided housing grouped in considered relation to community buildings—have come to life, and all this has meant untiring effort, study and research for the architects who have designed the schemes. The Minister of Housing awarded medals for the best schemes, a practice which is to be revived, not, we hope, so much as a stimulus to further effort as a mark of the high esteem in which domestic architecture is now held.

Architects are to be congratulated on having earned for housing its rightful place with other kinds of civic building. No longer can it be regarded as the poor relation; for indeed, if truth be told, it often requires more skill and ingenuity in design than many of the more monumental architectural masterpieces. The architects have earned their medals, and they are not to be blamed if they now make it plain that they would like to be paid as well.

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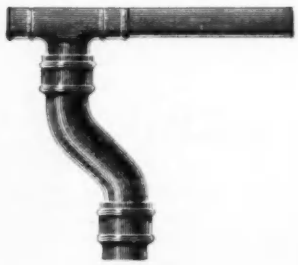

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Leading Article

New Fees for Old

'THE RIBA SCALES OF FEES for State-Aided Housing Schemes and for State-Aided Multi-Storey Flats have been withdrawn by the RIBA Council.' This is the opening sentence of the Explanatory Notes included in the new RIBA booklet entitled 'Applications of the RIBA Scale of Professional Charges to Repetitive Housing' announced on page 892 of this issue. It is a statement which many architects will greet with sighs of long-awaited relief. It comes at the end of long years of hardship and patient suffering for those architects who have carried the burden of house design, layout and supervision for local authorities since the war under the old scale of fees, often at financial loss which they were only able to carry by subsidy from other work in their offices paid for at the standard rates.

The new document, which is apparently to be known under the abbreviated and therapeutic-sounding title of 'The Application,' sets out the modifications of the standard scale which may be allowed for repetitive work. The circumstances in which the modifications apply and the amount of the reductions permissible are reasonable and proper, and it is unlikely that any architects will wish to quarrel with them. The terms in which the document is written are clear and precise, and the whole tenor of the new pronouncement has an authoritative ring which should hearten those architects who have felt the need for stronger backing and support from their professional headquarters in explaining their charges to parsimonious clients.

Housing before the war was the Cinderella of local government enterprise. To-day the local authorities are our biggest landlords and own the majority of houses built since the war. The peak effort of over 300,000 dwellings a year was a valiant achievement and one of which both councillors and architects alike can be proud. All around us great new housing developments, neighbourhood units and new towns—all comprising state-aided housing grouped in considered relation to community buildings—have come to life, and all this has meant untiring effort, study and research for the architects who have designed the schemes. The Minister of Housing awarded medals for the best schemes, a practice which is to be revived, not, we hope, so much as a stimulus to further effort as a mark of the high esteem in which domestic architecture is now held.

Architects are to be congratulated on having earned for housing its rightful place with other kinds of civic building. No longer can it be regarded as the poor relation; for indeed, if truth be told, it often requires more skill and ingenuity in design than many of the more monumental architectural masterpieces. The architects have earned their medals, and they are not to be blamed if they now make it plain that they would like to be paid as well.

No one will be sorry to see the end of those out-of-date foolscap sheets entitled 'Scale of Architects' Fees for State-Aided Housing Schemes' and their slightly better-off relation, the scale for State-Aided Multi-Storey Flats. The format of the new 'Application' which ties-in with the standard scale is in itself an acceptable innovation. Still more important, however, is the fact that the dreary classification of 'state-aided' for housing and flats has now been dropped as identifying a particular category of domestic architecture. All work design by members of the RIBA now comes within the scope of the standard scale of professional charges, and rightly so, while housing and flats no longer carry differentiations in charge.

The RIBA has showed strength with its arm. We hesitate to suggest anything about the proud and the mighty, but we certainly hope that the Ministry and the local authorities will be gracious in their acceptance of this long-overdue exaltation of much worthy architecture hitherto rated as of low degree.

Notes of the Week

Private Architects' Chance?; Barbican Design Team; Birmingham Overspill; Venice in the Sea; Allied Societies at Leeds; A New 'Banister Fletcher'; Builders in Piccadilly

THE CASE for making greater use of the private architect in local authority work has been set out on numerous occasions in these columns. Putting aside the principal argument—the added architectural interest which derives from a friendly competition between 'officials' and private practitioners—it begins to look as though there will inevitably be a swing towards the custom of placing more municipal work with private firms for the reason that local authorities are finding it increasingly difficult to get staff capable of designing the buildings required. Manchester Corporation is said to be short of 22 architectural assistants, and as a result the city's efforts to step-up its slum clearance programme are being jeopardised. A recent advertisement for 20 staff resulted in only one application from outside its own department being received.

Shrewsbury town council is in a similar predicament; an 'acute shortage' of assistants is reported, and it may be that work will have to be farmed out to private firms, possibly including drawing work on the new Shirehall, the Walford Farm institute and alterations at Apley Park. Both municipalities are proposing to step-up salaries. Is this the right course? Such action can only result in depriving other authorities of staff or, in greater probability, to persuade assistants away from private firms—thus speeding-up the unending cycle of transfer of assistants and pushing salary scales beyond an economic level. Local authorities and their architects must look into the economics of placing work beyond their own capacity with the private practitioners; sense as well as justice demands it.

Barbican Design Team

THE TREND towards the unified design team continues. Chamberlin, Powell & Bon, architects for the Barbican development scheme in the City of London, have set up an office in Little Britain, off Aldersgate-street, in which they have

LONDON ARCHITECTURE BRONZE MEDAL.—*The luxury flats at 26 St. James's-place, SW1, built to the design of Denys Lasdun & Partners, for which the RIBA jury has awarded the London Architecture Bronze Medal. The general contractors were J. Jarvis & Sons Ltd.*

been joined by staff from Davis, Belfield & Everest, the quantity surveyors; Ove Arup & Partners, consulting engineers; and G. H. Buckle & Partners, consulting service engineers. The team responsible for this great project will thus be housed under the same roof, and there should be a corresponding access of efficiency. The partners of the architectural firm are at the present time in Scandinavia studying current housing developments, but it is interesting to speculate whether the unit which has been established will be expanded to deal with other projects. If so, it will only be following current trends.

Birmingham Overspill

OUR COLUMNS have carried so much over the past few years on the subject of overspill arrangements for the City of Birmingham that the news, now made public, that Mr. A. G. Sheppard Fidler has been invited by the Minister of Housing and Local Government to carry out an investigation for a new town comes as a welcome surprise. The site envisaged is at Dawley, Shropshire, and the intention is that the new development, if it comes about (there are many old mine workings in the area) should relieve congestion in Birmingham and the West Midlands.

The Minister is to be congratulated on the appointment of Mr. Fidler and Birmingham corporation on allowing their City Architect to carry out the investigation. Mr. Fidler, as the first architect-planner of Crawley new town, has an unrivalled experience of the needs of such a creation; he will have the assistance of the Ministry staff in the survey which, among other things, must show what degree of extra cost is to be anticipated by reason of the nature of the site.

Venice in the Sea

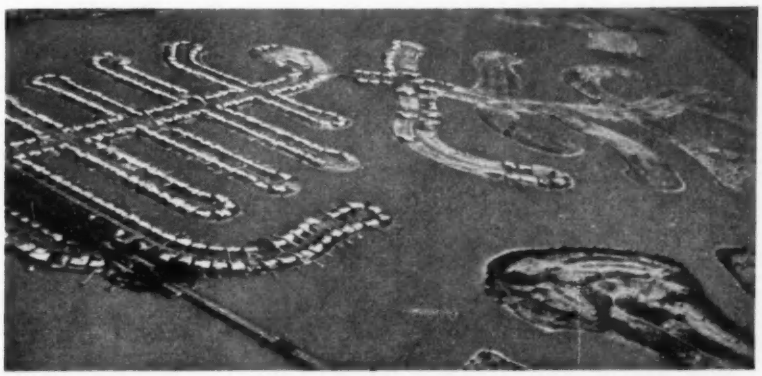
TO CREATE LAND where none before existed is perhaps the apotheosis of a planner's dream. Planners and developers alike will learn, somewhat surprisingly, that England is not the only country where building land is at a premium. A revealing article in a recent issue of 'Time Magazine' tells us that the citizens of Florida, USA, are in a similar predicament, for beyond the tawdry nightclubs, flashy neon façades and kidney-shaped swimming pools there lies a new and sustaining domain of factories, fresh communities and solid citizens. Like its banyan tree which anchors itself to the earth, Florida is reaching out to broaden its growing base. The shortage of building land and a compelling desire for a place in the sun has created a demand for waterfront sites so great that builders are turning parts of the state into little Venices, pushing fingers of land out into the sea, interlacing them with canals to create maximum water frontage.

Allied Societies at Leeds

A LIVELY DISCUSSION on topics of current issue to the profession can be expected at Leeds on Saturday, May 27, when members of the RIBA in the north of England will have the opportunity of talking over their problems in the company of Sir William Holford, PRIBA. The meeting, to be held at the Queen's Hotel, is due to start at 2 p.m., and it is hoped that as many members as possible will attend.

The agenda has now been arranged. After some opening remarks by the President time has been allotted for a discussion of the two topics on which the Allied Societies have expressed the main concern—the two-tier profession, and the package deal. Each discussion will be opened by a speaker on behalf of one of the Allied Societies, and replied to by a member of the RIBA Council. Then, after a tea break, there should be about an hour during which any member can raise any question that interests him. It is expected that this will, in fact, be a question and answer session.

In the evening, at 7 p.m. Mr. Percy Johnson-Marshall, ARIBA, Dist.TP, is to lecture, with the aid of three projectors, on planning and architecture in the United States, which he visited last year.



Waterfront sites dredged from Boca Ciega Bay, off St. Petersburg, Florida, USA (see note)

A New 'Banister Fletcher'

THE NEW EDITION of Banister Fletcher's monumental 'History of Architecture on the Comparative Method,' promised for the autumn, will bear the name of a new publisher—the University of London Athlone Press. Messrs. Batsford, who have published the book ever since 1896, thus sever connection with the publication. In making this announcement, the new publishers pay tribute to the long and outstandingly successful connection with the book maintained by Messrs. Batsford; the change has come about by reason of bequeathal of the rights by the late Sir Banister Fletcher to the RIBA and the University of London jointly. The University, it seems, has a settled policy of using the facilities of its own publishing organisation in respect of works for which it has a direct share of responsibility. The new edition, the seventeenth, has been revised by Professor R. A. Cordingley and completely reset with many new illustrations. It will cost 84s. We shall look forward to seeing the old classic in its new dress and meanwhile thank Messrs. Batsford for the careful attention they have given over the years to a publication to which British architecture owes much.

Builders in Piccadilly

ARCHITECTS, QUANTITY SURVEYORS, subcontractors and suppliers were among the guests at an intimate cocktail party given by the directors of Thomas Lowe and Sons Limited at the Public Schools Club in Piccadilly, W, on May 3. One of the hosts, Ian Robertson, came in for some thoroughly well-deserved praise from the ebullient head of a well-known scaffolding firm who insisted in an aside that he 'gratefully picked up the crumbs dropped by builders.' He did, however, express the gratitude felt by all in the industry to men like his host who spent so much time, despite the busy, flourishing and nation-wide activities of their companies, to the affairs of the National Federation and the various associated bodies. A fellow director, Frank Leadsom, also a prominent figure in joint industrial affairs expended much energy by dashing from guest to guest, looking after their individual tastes in conversation and liquid refreshment. Such gatherings do much more than is generally realised to further good relations in the industry and Mr. David Lowe and his co-directors contribute in more ways than one towards these better relationships.

Poet's Corner

IT IS ANNOUNCED that Frank Yerbury is to retire from the post of Director of the Building Centre at the end of the year.

'Twas years ago I first did meet
Frank Yerbury—at Tufton Street,
  Where Gothic casts, as I recall,
  Covered the gloomy staircase wall,
Calling the student ever back
Down architecture's well-worn track;
  But then, as now, naught could disturb
  The charm and cheerfulness of Yerb.
Then came the move to Bedford Square;
A revolution started there
  That gave to the AA its *ton*,
  With Atkinson and Robertson
And Yerbury, admirable trio,
Working in harmony, *con brio*.
  Who shall record F.R.'s exertions—
  The far-and-wide AA Excursions,
The friendships made on every hand,
The good work done, inspired and planned
  Who founded thus to admiration
  Himself became a firm Foundation!
Vain the attempt his range to measure—
Love from us all, and years of leisure!

ANON.

Saltire Award Flats, Newhaven

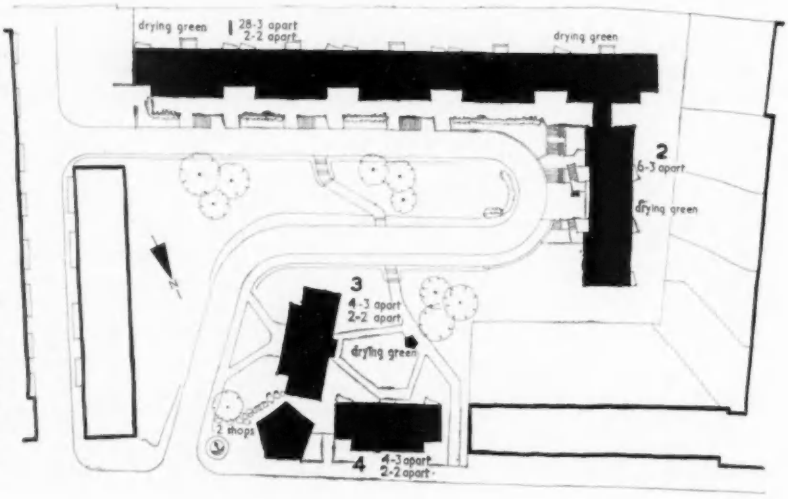
SIR BASIL SPENCE & PARTNERS, architects

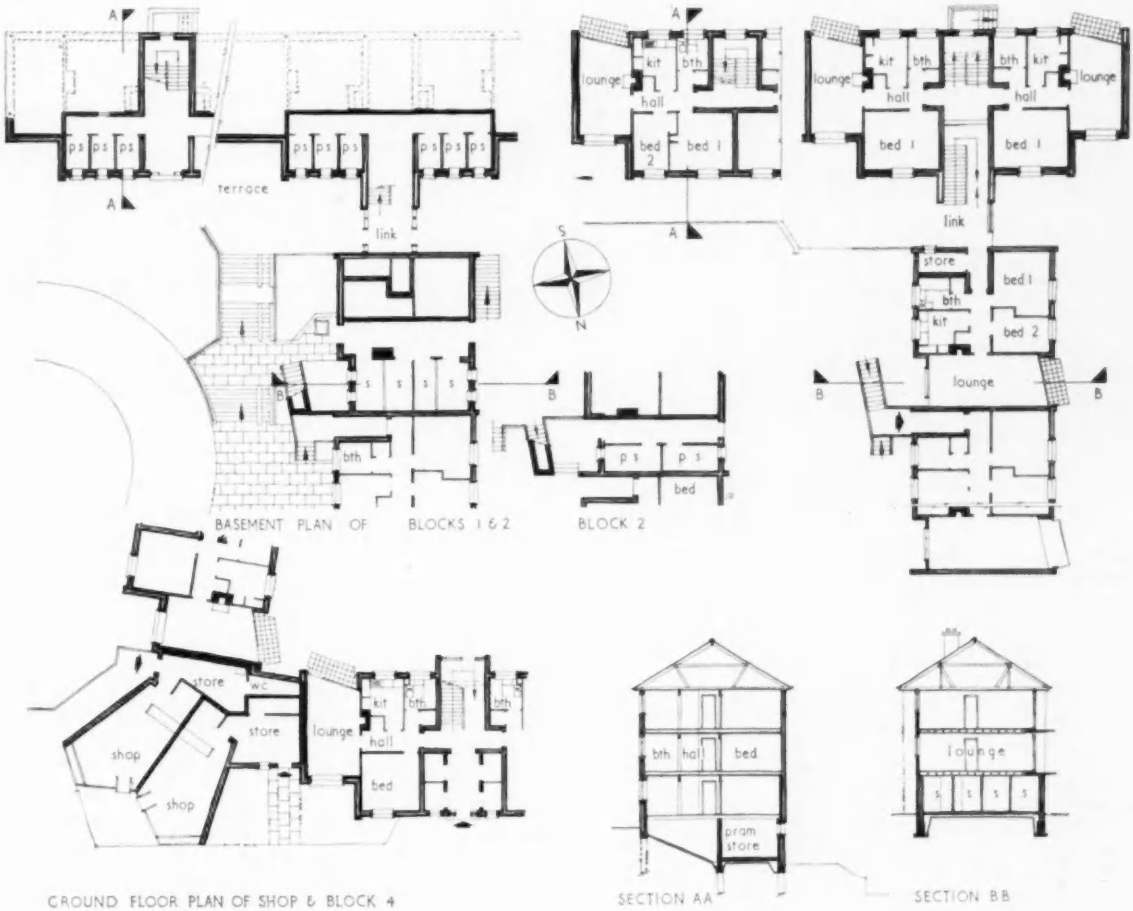
WM. ARNOTT MACLEOD & CO. LTD., general contractors

view along the terraces of block 1 towards block 2

THE SALTIRE SOCIETY design award for flats completed during 1959 was given to this scheme at Annfield, Newhaven, for Edinburgh Corporation. The Society feel that this particular solution merits close study by housing authorities faced with the problem of building on hilly sites. Full use is made of changing levels and careful attention has been given to the design of paths, ramps, steps and retaining walls.

The scheme was developed on a gap site, a steep slope facing north on to the Forth, previously used for the drying of fishing nets. A long 4-storey 30-flat block runs along the south boundary on the high ground; abutting to it (on the west) is a two-storey 6-flat stepped block; at the entrance to the access road are two wings of 3-storey 6-flat blocks with





Scale: 1 in. = 32 ft

blocks 1 and 2 from east

view towards block 1

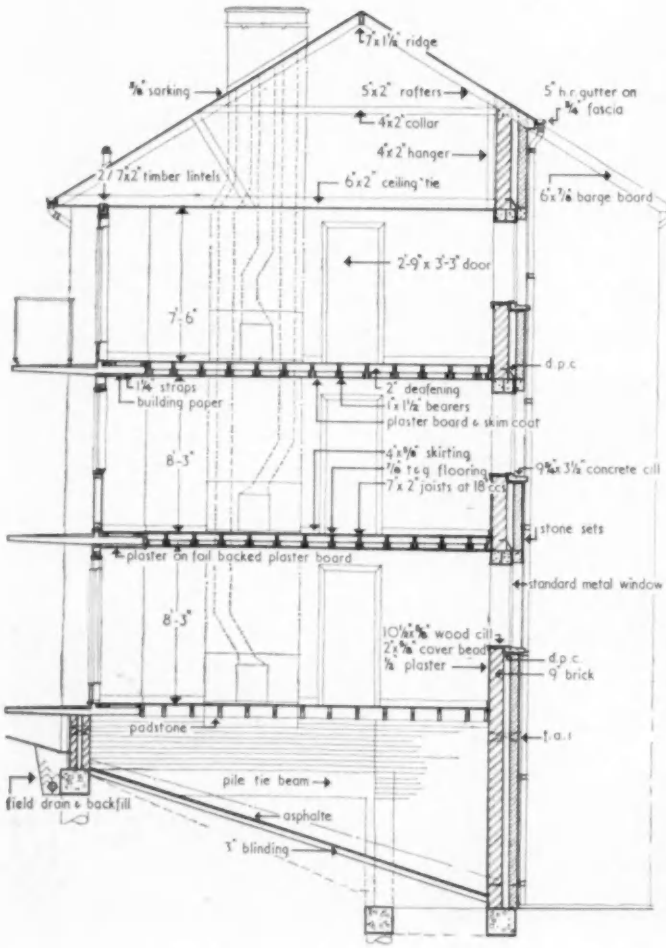
Saltire Award Flats

the corner shop and block 3

a unit of two shops at the junction.

The structure is of traditional load bearing brick walls, pitched roofs and timber floors, with stairway access. In view of the nature of soil conditions the foundations for the 4-storey block are driven piles. The remaining blocks, though designed for strip foundations, have in the most part rafts owing to the discovery of collapsed air raid shelters during excavations.

In deference to the strong local character of Newhaven, traditional materials have been used with Balachulish slate roofs, walls of colour-washed harling and granite setts. Internally, normal housing standard finishes; solid fuel space and water heating; single stack drainage; Paladin bin refuse disposal. Quantity Surveyors: James D. Gibson & Simpson; consulting engineers: T. Harley Haddow & Partners.

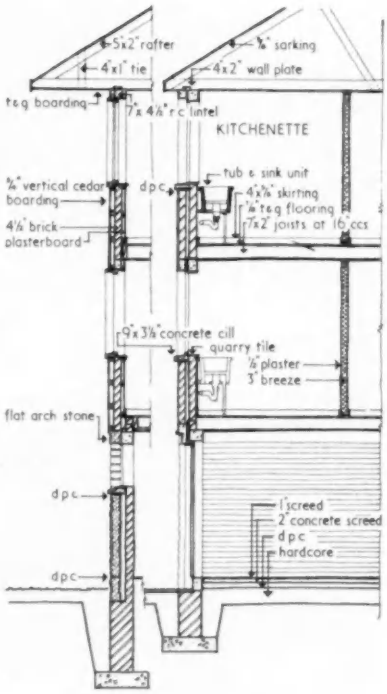


WALL SECTIONS OF THE STEPPED BLOCK (2)

Scale: 1 in. = 8 ft.

SECTION THROUGH SOUTH BLOCK LIVING ROOMS

Scale: 1 in. = 8 ft.



sub-contractors & suppliers:

Joiners: George Wilson (Stonehouse) Ltd.; *plasterers:* Peter Kelly & Sons Ltd.; *plumbers:* Byard & Co. Ltd.; *slaters:* George Riddell Ltd.; *electricians:* Wm. Allan Smith & Co. Ltd.; *steel windows:* Crittall Manufacturing Co. Ltd.; *glaziers:* James Thow Ltd.; *asphalters:* W. G. Walker & Sons (Edin.) Ltd.; *blacksmiths:* Charles Henshaw & Sons Ltd.; *piling:* Franki Compressed Pile Co. Ltd.; *painting:* B. & J. Farrell; *roadworks:* Estate Road Development Co. (Edin.) Ltd.

Cutting the Cost of Working Drawings

Current Practice in American Architects' Offices

BY WILLIAM TATTON-BROWN, MA, ARIBA

Students taking their RIBA finals this summer are being offered four-figure salaries by some offices. This poses the economic problem: 'How can architectural practice pay?' In this article William Tatton-Brown, who has recently returned from a second visit to the USA, describes some short cuts that American architects take in the production of working drawings and suggests that some of them would be worth while following up by a more detailed examination on the spot.

LOW FEES AND HIGH SALARIES have forced architects in the USA to take a realistic attitude to the production of working drawings. Unwilling to cut down on design time or on site supervision, they have concentrated their attention on working drawings, the purely mechanical aspect of translating sketch plans into contract drawings. As a result the number of working drawings has been drastically reduced. Here are some examples:

400 bed-hospital at Charlottesville—80 drawings (39 architectural); 134 bed-hospital at Colorado—156 drawings (45 architectural). In the latter, designed by Skidmore, Owings & Merrill, the distribution of drawings, apart from the 45 architectural, were: 46-60 structural, 61-88 heating and ventilating, 89-118 plumbing and kitchen, 119-148 electrical, 149-152 site works, and 153-156 landscape.

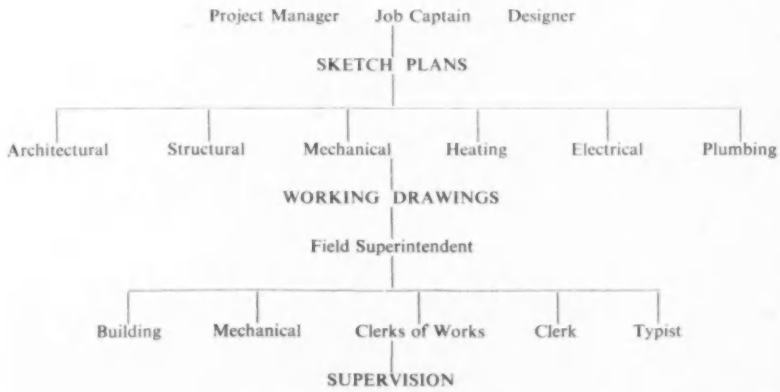
There are a number of reasons for this, some of which are apparent to anyone visiting an American architect's office; others require a more prolonged study.

The most important difference between our two countries' practice lies perhaps in a difference of basic philosophy. In England most architects think of themselves or like to be considered as 'all-round men,' equally adept at design, working drawings, specification-writing and site-supervision—they are essentially amateurs. In America they are professionals. There is a greater tendency towards specialisation, and offices are often organised on a task rather than a job basis. This does not mean that an architect cannot do any task, but he usually prefers to concentrate on one, the one he is best suited for. This may change as time goes on, but he sets out to discover his particular sphere of activity as soon as he graduates from college. On joining an office he may, for instance, spend all his first year on the site as an assistant supervisor, or alternatively as part of a working drawing team concentrating, say, on plumbing. Later he may switch and do nothing but sketch designs until he finds the task he is best fitted for. In this way he builds up an expertise and facility which improves from job to job and his output and performance can be measured and estimated in advance—a most important point in programming work through the office.

The Job Captain and the Designer

As soon as the client has signed an agreement, the partners or project manager introduce the job captain and the designer. They sit in on the briefing conference and prepare sketch designs. Once these have been approved, the job captain plans the production of working drawings. He calls for estimates from the heads of different sections including, on a complicated job, all the major engineering consultants such as structural, mechanical, heating and ventilating, electrical, plumbing, lifts, etc. Some of these in a large office may be on the permanent staff, others will be independent consultants. The length of time required to work up design sketches can be fairly accurately predicted. I was given figures of four man-weeks for a typical engineering sheet (including calculations) and two man-weeks for an architectural sheet once the design had been settled. The size of a sheet is 10 sq. ft.

Specification writing is usually done by



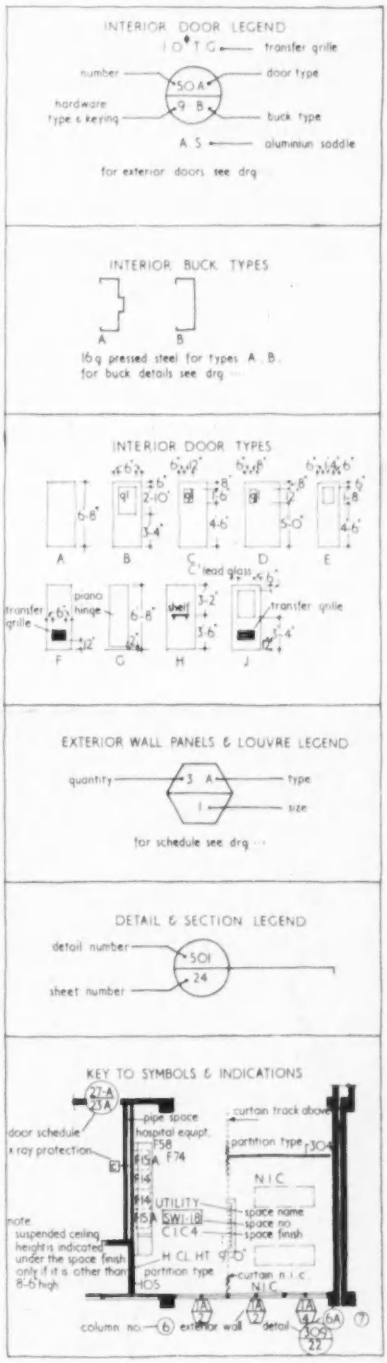


Fig. 1.—A standard system of symbols. Part of a title sheet illustrating the common conventions. Note the detail and section legend, the circle containing numbers above and below the diameter

experienced men who specialise in this work and who resemble fairly closely our quantity surveyors. Finally, when the job is going out to tender and before the contract is signed, the job captain starts handing over to the field superintendent who, with his clerks of works on the building and mechanical side, is responsible for site supervision. The job captain retains over-all responsibility and in turn consults the designer for the colour schemes, and the engineers for specialist equipment, etc. The day-to-day architectural aspects of contract administration and site supervision, however, are normally handled by the field superintendent.

This system would not work in this country unless there were some radical changes in our scale of values. First, in the exaggerated prestige of the designer—in the USA I got the impression that he was regarded as an important member of the team but no more important than any of the other members who rightly consider their contribution indispensable. Many architects, at any rate for a time, enjoy being 'production men' and take a pride in the translation of 1/16 scale sketches into efficient contract drawings. (Yamasaki told me that before he had his own office he preferred to do nothing but working drawings and resolutely took no part in the design side. He felt that with that particular firm he could both improve his experience and make his most effective contribution by leaving questions of design to others.)

At the next stage the specification man feels *he* has described the whole job for contract purposes, and the field superintendent that *he* has built it. Each in his own way feels, and rightly so, that it is *his* job. Continuity is maintained by the job-captain who stays with the job from start to finish. The partner or project manager ensures that the over-all concept is loyally retained throughout all the stages of its working out so that the final result is worthy of the firm and unmistakably bears its hallmark.

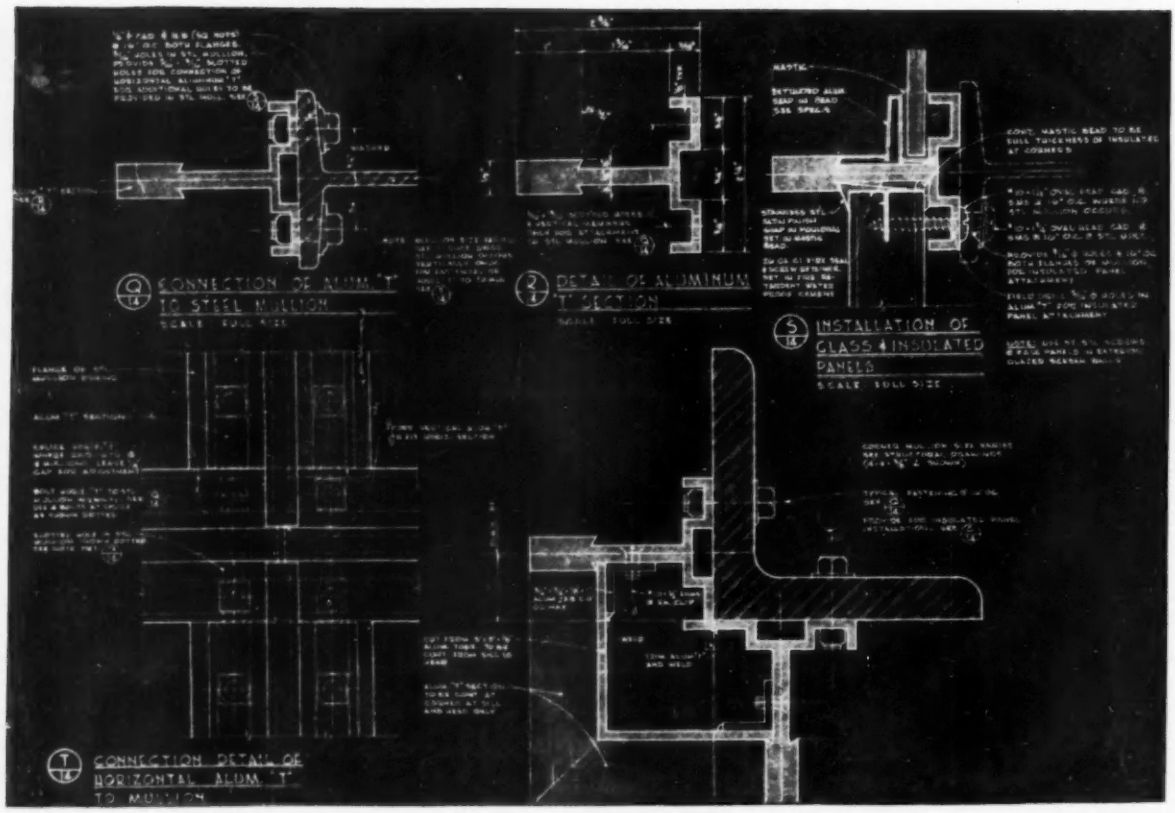
Simplicity of Nomenclature

The second difference in values is the status of the 'production men.' Instead of being regarded in the 'Beaux-Arts' tradition as mere 'nègres'—hacks that work-up the scribbles that emerge from the pockets of the ace designer—these architects are masters of their craft. They have a completely professional attitude to their work and this has resulted in a uniform level of competence. There is a remarkable similarity between working drawings produced in any part of USA. A standard system of symbols and nomenclature has been evolved corresponding to the British quantity surveyors' standard method of measurement, for in the absence of a bill of quantities these drawings are the basis on which the contractors prepare their bids. A high degree of simplicity, clarity and economy of presentation has emerged.

The title sheet of a typical set of drawings illustrates the common conventions. There are the usual symbols for materials such as concrete and brick, and schedules and abbreviations with which we are already familiar. The most important convention is the detail and section legend, the circle containing two numbers, one above and one below the diameter (fig. 1). The upper one refers to a detail number, the lower to a sheet number. By using this circle on any part of a small scale plan or elevation, an architect can draw a contractor's notice to a detail sheet drawn to a larger scale and thus ensure that all information is conveyed once and once only—a cardinal principle in the production of efficient working drawings.

The tracings themselves are often beautifully drawn (fig. 2). Architects take trouble about such mundane things as backing sheets which are smooth and unpunctured by drawing pins (now completely replaced by 'Scotch' tape); propelling pencils with special point sharpening machines which maintain a needle point on a medium-soft pencil (essential for good reproduction): rubber-dust sprinkled on the tracing paper which acts as ball bearings for set-squares and T-square which clean the tracing paper as they slide up and down; a paper hanger's 10 in. soft brush for clearing the dust off the particular section of the sheet on which work is going on; 'Zippertone' to stick on to reduce cross hatching; and

Fig. 2.—Part of a detailed sheet drawn with a medium-soft pencil. Note the fine hatching and shading, the latter produced with carbon dust



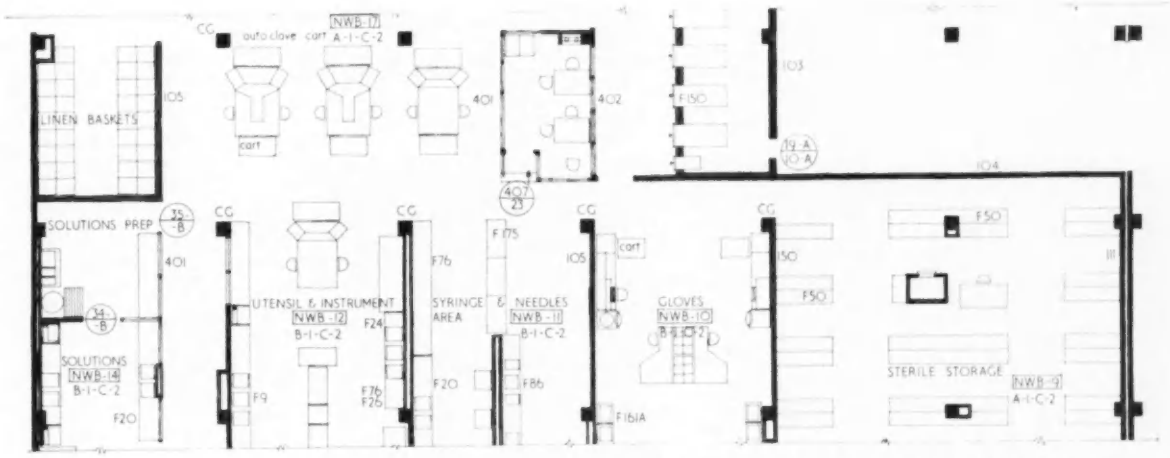


Fig. 3 (above).—Part of a typical plan showing space available for cabinets, furniture and built-in equipment

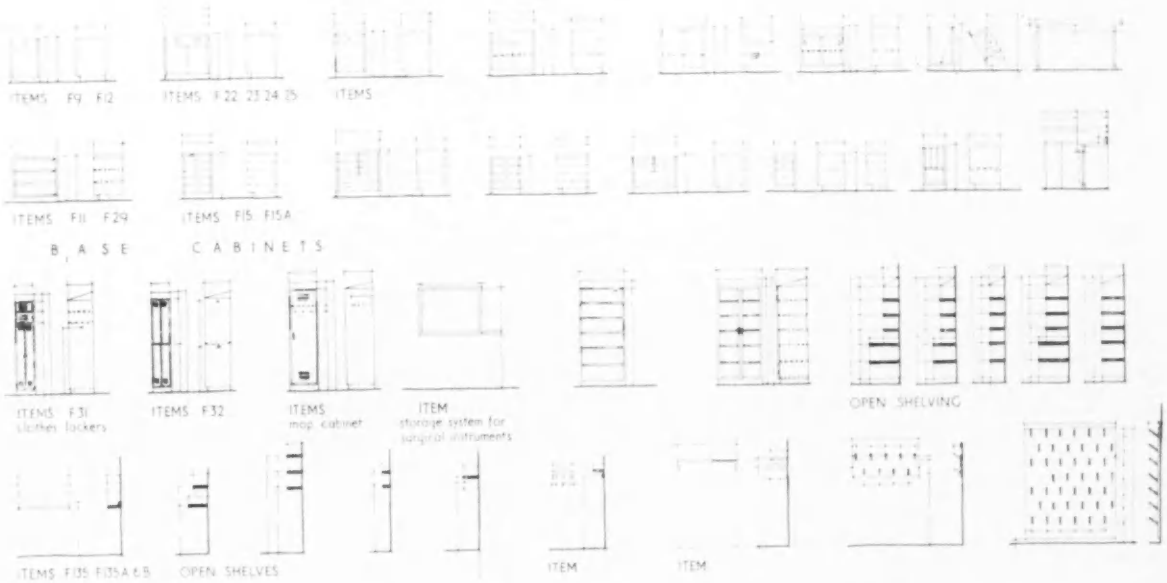
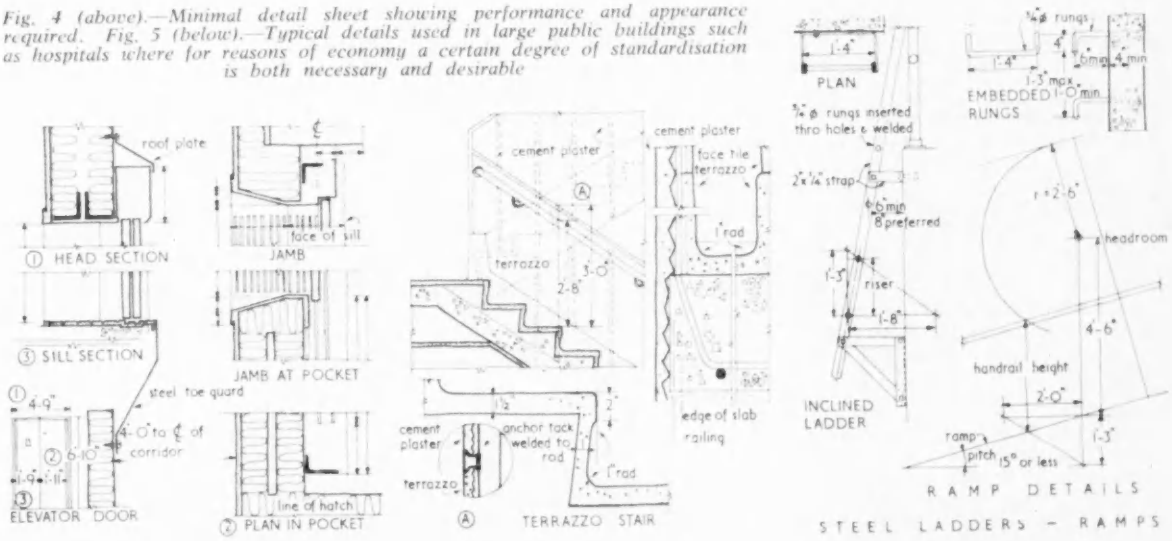


Fig. 4 (above).—Minimal detail sheet showing performance and appearance required. Fig. 5 (below).—Typical details used in large public buildings such as hospitals where for reasons of economy a certain degree of standardisation is both necessary and desirable



the use of cardboard 'pencils' and carbon to shade in parts of plans or elevations. All these aids are accompanied by a first-class printing service, such as we now have in this country, which is capable of strengthening the imprint of a pencil line until it is equal or superior to ink.

The Working Drawings

The production of working drawings and specification writing is undoubtedly speeded up by the use of reference works such as 'Time Saver Standards,' Ramsay and Sleeper's 'Architectural Graphic Standards' or Don Graff's 'Data Sheets,' and the magnificent presentation of manufacturers' information in Sweets' 'Standard Catalogues.' The main reduction of working drawing time, however, arises from a different conception of the rôle of the architect and the sub-contractor or specialist in the production of working details. In this country there used to be, and sometimes still is, resistance to the widespread use of sub-contractors' details (on the grounds that everything must bear the indelible signature of the designer). In the USA, on the other hand, for the majority of commercial buildings, schools or hospitals, there is no such reluctance.

It would be thought extravagant to inflict a 'custom-built' detail on one's client when there is a perfectly serviceable alternative in current production. The high standard of most metal cabinet work and built-in equipment of course makes this form of 'shopping-around' far more attractive; but the principle which underlies the American attitude is that the man who has to make up an assembly must produce the drawing showing how he proposes to do it and *not the designer*. The designer merely gives an indication of the space available (Fig. 3), the performance and appearance required (Fig. 4) and leaves the sub-contractor free to decide how, with his own particular skills, machine tools and manufacturing potential, he will carry out the job. The architect thus only has to approve the drawings and a great and increasing weight of detailed design is shifted from his shoulders to those of the general contractor and through him to the specialist sub-contractors.

It is no longer true that every detail is drawn before a contract is signed in the USA. Every part of the building is described or should be described, but a very large number of shop-drawings are prepared and approved after the contract is signed and during the course of the job.

To sum up, a superficial view of American drawing office practice would seem to show that there is a case for looking again at our assumption that the ace designer is necessarily the man to run the job. The skills and expertise of the 'production men' should be given greater recognition—there may be something to be said for choosing the 'job captain' from their ranks. Economy of effort accompanies a greater degree of specialisation. We have certainly something to learn from the Americans in the mechanical business of producing working drawings, and it would be a good thing if this and the growing practice of off-loading shop drawings on to the sub-contractor could be studied in greater detail on the spot and the results modified or adapted for use in this country.

Drawings are reproduced by courtesy of: Messrs. John Graham & Co., architects and engineers, of Seattle, Washington; Messrs. John Lyon Reid and Partners, architects and engineers, of San Francisco, California; Isadore and Zachary Rosenfield and E. Todd Wheeler, architects, of New York; and Ellerbe and Company.

Architects' Fees for Housing

RIBA Announce Substantial Increase to Encourage Better Design

THE SPECIALLY-REDUCED scales of fees for state-aided housing schemes and multi-storey flats, introduced by the RIBA in 1944 to aid the post-war housing effort, are to be withdrawn on June 1, 1961. From that date the normal RIBA scale of fees will apply to all repetitive housing and multi-storey flats, although there will be a substantial reduction in respect of any repetitive elements in the design—as, for example, where a particular house or flat type is used more than once in a scheme, or has been previously used in another scheme for the same client. The effect will be substantially to increase the fees paid to private architects by local authorities, new town corporations, and housing associations. The new and old charges are explained, and examples given below. A booklet 'Application of the RIBA Scale of Professional Charges to Repetitive Housing' (3d. from the RIBA) explains the new arrangements.

The RIBA has been compelled to make this change, it is stated, because the existing cut-rate fees are inadequate to sustain the cost of good architectural design. These fees, introduced in 1944 and only increased by 40 per cent since then, take no account of the vastly greater increase in the cost of running offices or of the cost of living. Since 1944 the need to increase housing densities (fitting more houses into each acre), to provide a garage for every dwelling and to separate vehicles from pedestrians have made housing layout and design infinitely more complex and difficult than it was when semi-detached houses were strung along estate roads. The old scales, which applied to 'state-aided' dwellings, have been made out of date by changes in housing subsidies, for which many publicly-provided houses and flats no longer qualify.

Many architects, including many of the best housing designers, have lost money on housing schemes and have refused to do any more. Others have done the work at a loss out of public spirit. But the low rates do not permit architects to spend the necessary time on the complex problems of layout and design, and encourage the excessive repetition of standard types.

The RIBA has in fact been attempting to raise housing fees by agreement with the Local Authorities Associations for many years. Negotiations finally broke down in 1959 over the local authorities' refusal to agree even to a modest increase. The scale was last revised in 1955.

The new arrangements do *not* affect either:

(a) The private client who has commissioned a single house, for which the RIBA scale already prescribes the minimum fee; or

(b) The speculative builder who is also the developer. Because, in this case, there is no contract, the architect's fee cannot be charged on the contract price. An interpretation of the RIBA scale, by which the fee is charged on the selling price of the house, was introduced in 1959 and remains in force. The new arrangements in fact bring the fees for speculatively built and publicly-provided housing more nearly into line.

The new arrangements apply to all other clients for repetitive housing or flats, including private developers building by contract.

The Old Scales

The scales for state-aided housing adopted in 1955 began at £34 11s. 0d. a dwelling for the first four houses, and came down to £7 11s. 0d. a dwelling for each dwelling over 225. The fees for state-aided multi-storey flats began at 5 per cent for contracts under £10,000, coming down to 2 per cent for contracts over £250,000, with a reduction for repetition in a second contract.

The New Charges

The normal RIBA scale begins at 10 per cent for new works costing less than £700, and comes down to 6 per cent for contracts over £7,000. For nearly all repetitive housing, therefore, the fee will be 6 per cent, but this is subject to a reduction, by prior agreement, by an amount not exceeding 3 per cent of the cost of the repetitive elements in the scheme.

Examples

Detailed application of this principle is complicated, but the following examples show how the old and the new scales operate:

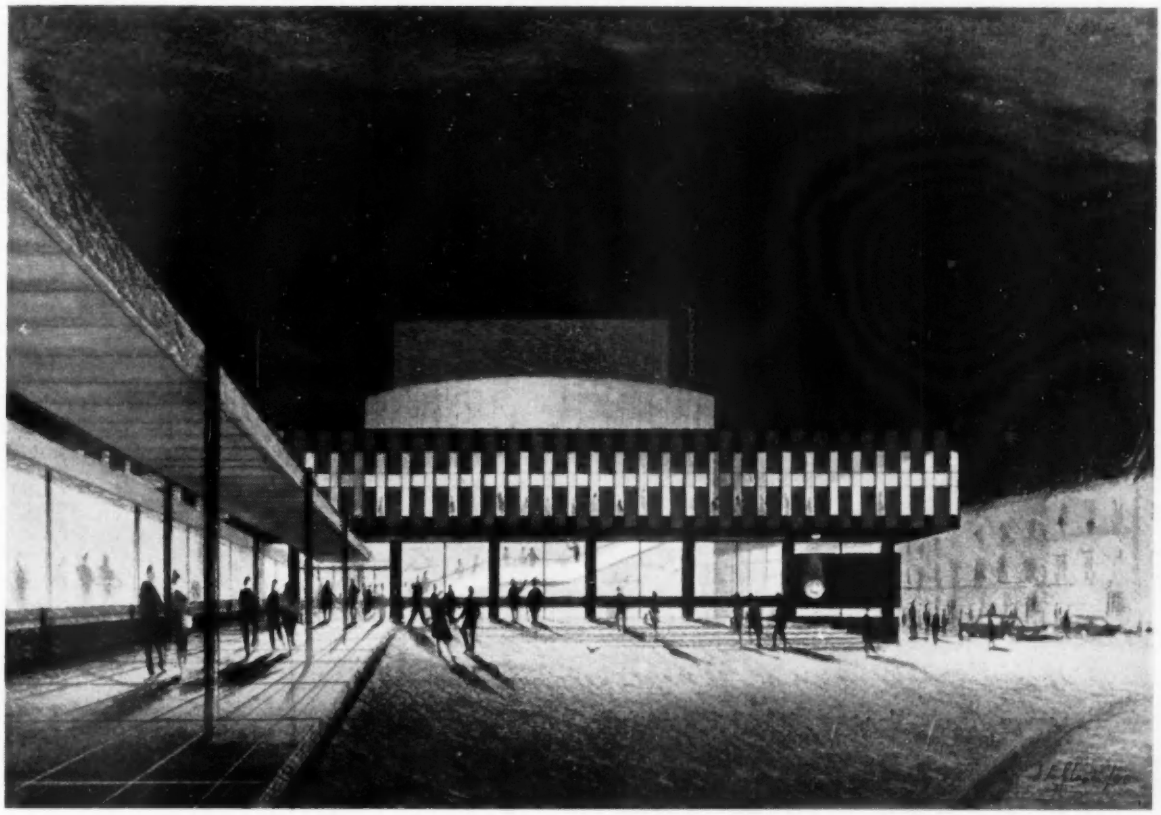
Example 1
4 Houses (2 types)
Total cost of construction £6,000
Old fee: £137
New fee: RIBA scale fee at 7 per cent £420
less, reduction for repetition 78
£342

Example 2
50 Houses (5 types)
Total cost of construction £75,000
Old fee: £1,367
New fee: RIBA scale fee at 6 per cent £4,500
less, reduction for repetition 1,755
£2,745

Example 3
48 Flats in 4 Blocks, 3 Identical Blocks
Total cost of construction £133,000
Old fee, at 3½ per cent: £4,655
New fee: RIBA scale fee at 6 per cent £7,980
less, reduction for repetition 1,350
£6,630

The Nottingham Playhouse

PETER MORO, FRIBA, architect
CLARKE, NICHOLLS & MARCEL, structural engineers
W. J. SIMMS, SONS & COOKE LTD., general contractors



main façade of the theatre

THIS CIVIC THEATRE, designed to seat 750 people, will house the local repertory company who have been playing so far in a converted cinema. The main feature of the theatre will be its adaptability to two differing forms of staging, either as a picture frame theatre or as an open-stage theatre.

There are, of course, many open stage theatres in existence, the most familiar being the Shakespeare memorial theatre in Stratford, Ontario, where the audience sits in a semi-circle round a projecting stage; the vast majority of theatres however are picture frame theatres where the audience is arranged usually in a fan-shaped auditorium determined by sight lines. The two forms have never been successfully combined. Very often a make-shift forestage is introduced in front of the proscenium arch with the picture frame closed and this arrangement is never satisfactory. When the picture frame is not used the fan-shaped auditorium makes no sense architecturally and is totally unsuited to an open-stage production which requires a concentric arrangement of seating within an easily recognisable shape which envelops action and audience in one architectural volume. Alternatively, theatres which have been designed as open-stage theatres simply write off a large proportion of seating when a picture frame is introduced. This is perhaps not serious when the audience is very small and when the loss of seating is no great financial embarrassment. It is quite impractical in the case of a medium-sized professional theatre where it is out of the question substantially to reduce seating during one form of production.

The Nottingham theatre will be the first professional medium-sized theatre which can be used for open-stage productions as well as picture frame productions, both being equally satisfactory architecturally. This has been achieved by making the auditorium circular. When the open stage is used the circular auditorium encloses action and audience in one clearly defined architectural space, and the seating is arranged in curved rows with some side seating facing the side of the projecting fore-stage. Similarly the balcony wraps round the auditorium wall, making the action a truly focal point.

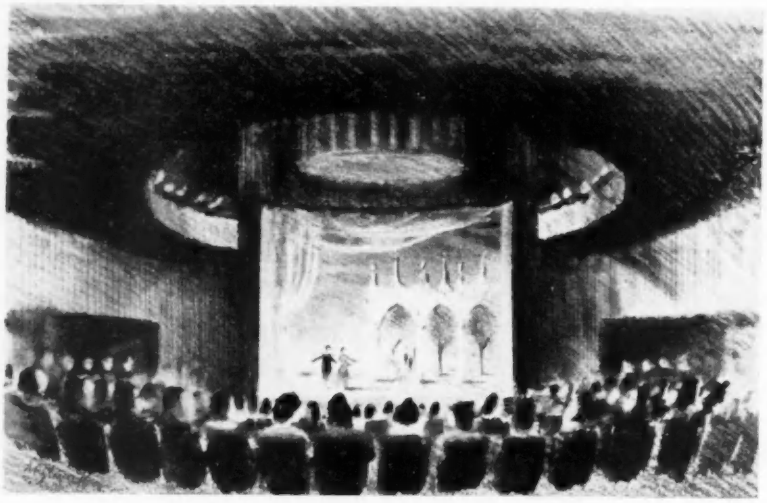
When the theatre is used as a picture frame theatre a portion of the cylinder is cut away and through it can be seen the picture frame stage, the audience looking, as it were, from one space into another. The open stage is mechanically operated and can be lowered to stalls level when it will carry additional seating, or lowered further still to form an orchestra pit. Both forms of stage can, of course, be used in conjunction, allowing the greatest possible flexibility which neither one of these forms can provide by itself.

Back-stage the theatre is equipped

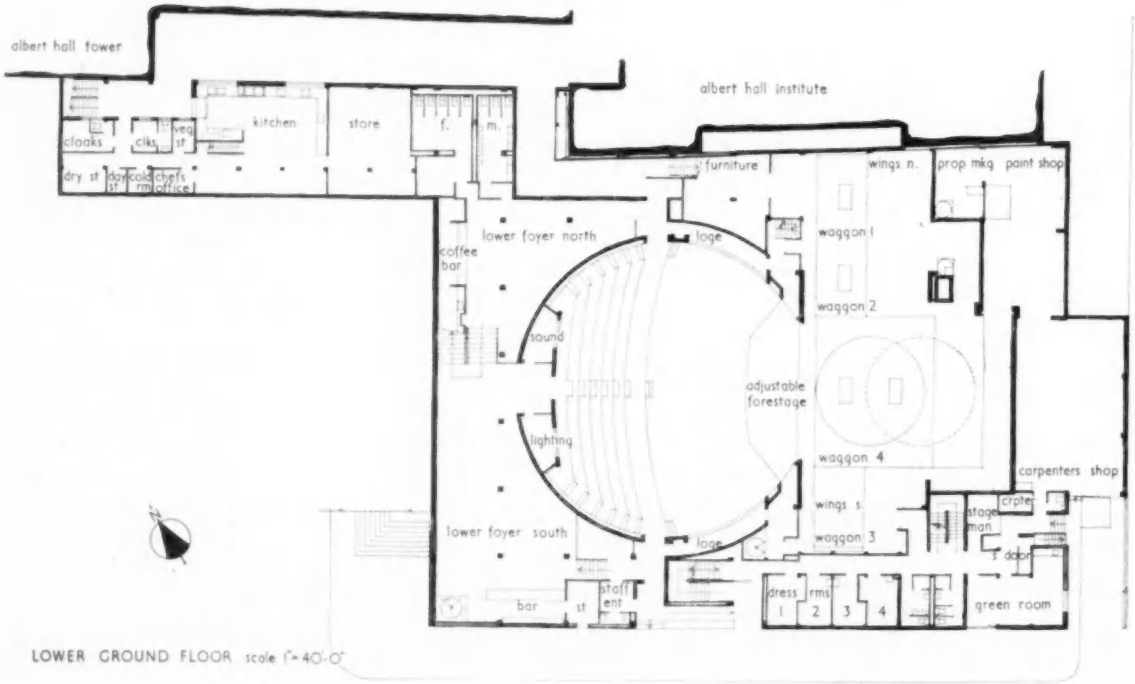
with properly dimensioned workshops consisting of carpenter's shop and paint frame, wardrobes, wardrobe-making, laundry and a full-scale rehearsal room, as well as well-equipped dressing rooms and a Green Room. There are electricians' rooms, rooms for recording sound effects, band room, etc., and ample storage accommodation. At the front of the house are generous foyers, some of which can be used for exhibition purposes and theatre club meetings, with bars at all levels and a restaurant and café which can be used either in conjunction with the theatre or separately.

The architectural conception is clearly expressed and visible from the outside. The reinforced concrete cylinder enclosing the auditorium forms the core of the composition and can be seen through the transparent walls of the surrounding foyers. The concrete drum itself will be enriched by an abstract relief by Geoffrey Clarke, and the Arts Council is contributing towards the cost of this. At night the movement of the people through brightly lit foyers at various levels can be seen from the outside and it is hoped that this in itself will be an important factor in attracting audiences.

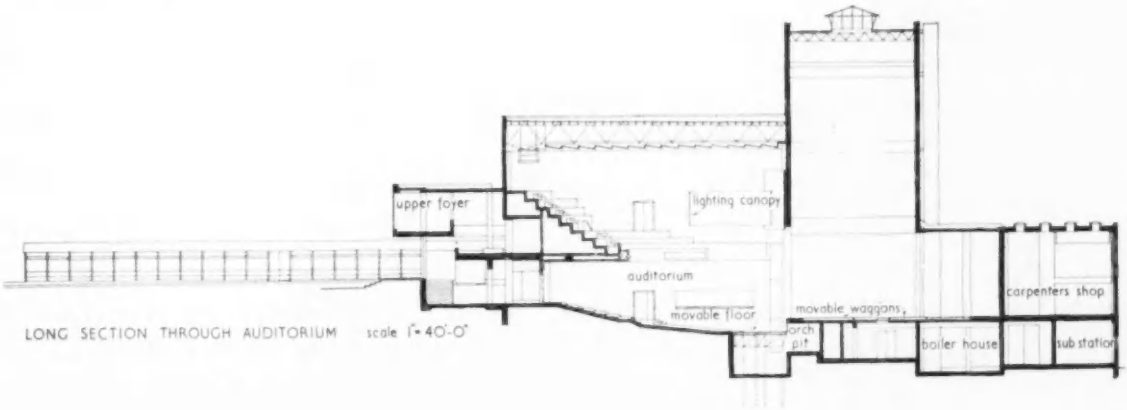
The contract has commenced and is due for completion in two years. Theatre consultant: Dr. Richard Southern; quantity surveyors: Davis, Belfield & Everest; acoustic consultant: Henry Humphreys; services consultants: Steensen, Varming & Mulcahy.



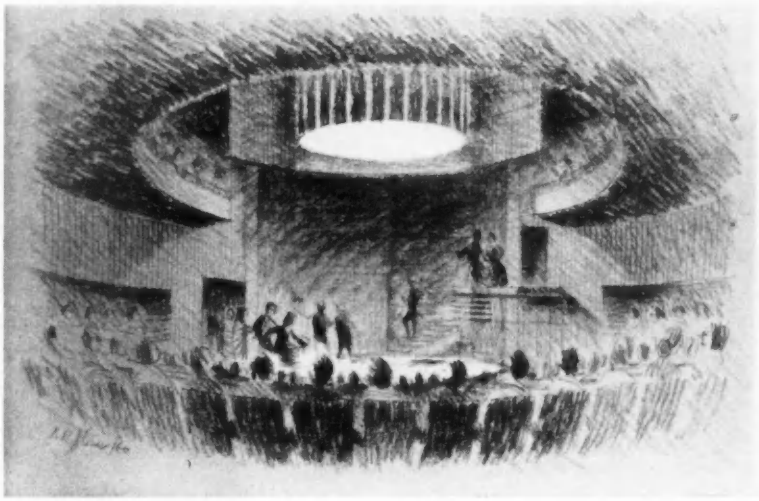
auditorium with picture-frame stage



LOWER GROUND FLOOR scale 1"=40'-0"

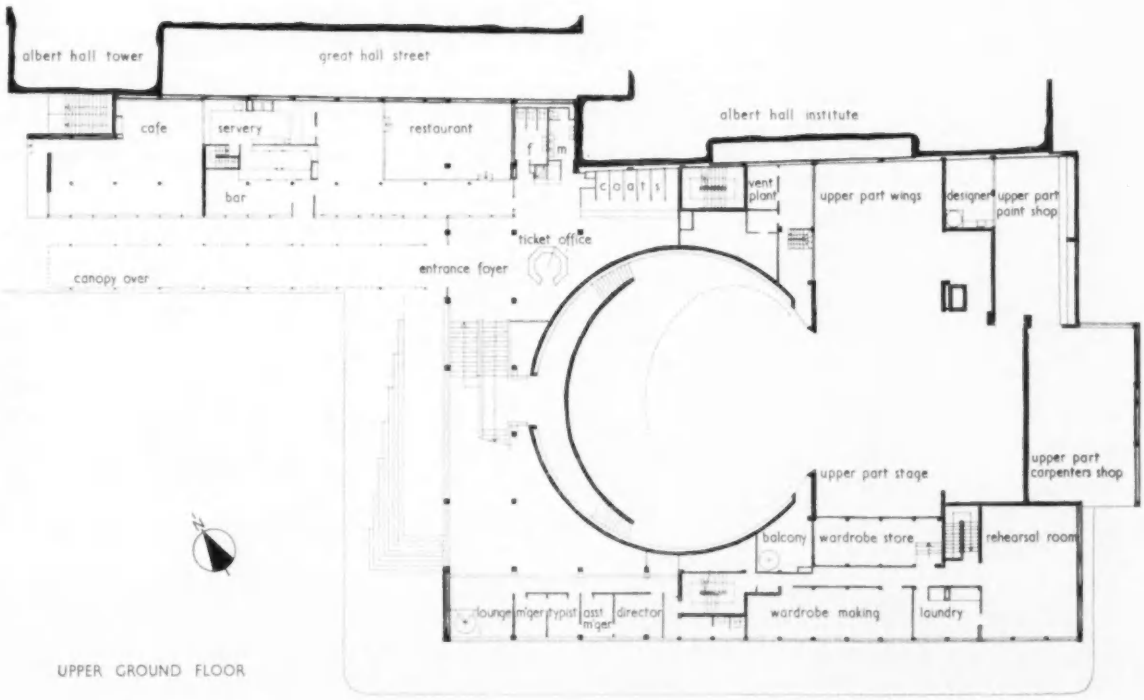


LONG SECTION THROUGH AUDITORIUM scale 1" = 40'-0"



The Nottingham Playhouse

auditorium with arena stage



UPPER GROUND FLOOR

Letters to the Editor

Architecture at Artists' Exhibition ; Training for Site Management ; Institute of Building Site Management

SIR,—If sufficient support is forthcoming it is intended to incorporate Architecture in the Summer Exhibition of the Royal Society of British Artists.

If any of your readers would care to submit their work (sending in day is June 5) they can obtain the necessary entry forms from me at this address.

Drawings, photographs and models are welcome and we naturally like to see an architect's most recent work and even aspects of projects 'on the drawing board.' We are not particularly interested in swell 'renderings' which so often obscure the real technique of the architect under that of another art.

The Royal Society of British Artists' Summer Exhibition will be open to the public from June 17 until July 7.

EDWARD HALLIDAY, President, Royal Society of British Artists,
62 Hamilton-terrace,
St. John's Wood, NW8.

Training for Site Management

SIR,—I have read with great interest reports of addresses by Mr. Peter Trench and Mr. Harry Vincent, FIOB, respectively, published in your issues of April 14 and 21.

To me as a person who has spent 15 years on various sites, both at home and abroad, these two gentlemen show a singular lack of knowledge of the structure we know as 'site management.' Mr. Trench has the impression that only a superman can build buildings, and Mr. Vincent does not appear to hold a dissimilar view. For their benefit, I would tell them that supermen do not exist unless, of course, they read the 'Daily Express,' but teams do and that is what is missing today on sites—teamwork. Teamwork, Messrs. Trench and Vincent, is based on mutual respect by the team for each other's capabilities and a friendliness towards each other personally. On how many sites today do you get this phenomenon? Very few, I can tell you, and why? Because the companies encourage personal ambition in each man which must, apart from a very few—and I have never had the pleasure of working with or meeting them—must breed selfishness, greed, intolerance and impatience. If my analysis is incorrect, why do these large companies place so much emphasis on teamwork? They know it is beginning to fade away because of the monster they themselves created—ambition.

Mr. Trench suggests that the root cause is the lack of the old type general foreman coupled with the increased complexity of building today. What utter rubbish! Buildings are no more complex today than they were 50 years ago. I agree that there are new materials but these were principally designed and made to make up for the lack of craftsmen and to make installations and finishings easier, not more difficult. I also agree that there are more specialists such as air conditioning contractors, but they are specialists, and site administrators can call upon them for their particular knowledge and skill.

No, Messrs. Trench and Vincent, you are quite wrong in your thinking, in fact I will go so far as to say that the purport of your discussions is to try to set up an educational barrier; since when have university graduates had the right to claim the prerogatives to management and the remainder to inferior positions, dancing attendance upon them? This frankly reeks of social class arrogance.

Your particular thinking is retrograde and is developed from shining your trousers on boardroom chairs. Get out on to the sites and find out what is wrong and don't send your minions to do the work for you. Get to grips with the problem and you will find that it is teamwork that builds buildings: (a) quickly; (b) to the budget; (c) to the programme; (d) to one's self-satisfaction as well as to the client and one's employer.

Neither graduate nor sandwich course extracts make the man you require. They are born not made.

I notice you did not mention site conditions of working both for the craftsmen and the administration. Put that house in order and a much pleasanter picture will prevail—who knows, it might lead to a vote of no confidence in the bonusing system.

WILLIAM E. TARBOTTON [AIQS],
94, Pinner View, Harrow.

'I could hardly make ends meet on those ridiculous fees!'

Institute of Building Site Management

SIR,—The London Association of Builders' Foremen and Clerks of Works at its last monthly general meeting announced the intention to change its name to—'The Institute of Building Site Management.' This to come into effect on January 1, 1962.

This step has been taken in view of the changes in building education, the need for re-thinking as to the future requirements of the men who are in charge of site operations, or who are training for such positions, and the fact that the term 'Builder's Foreman' does not adequately describe the status of those men.

Looking to the future, the Association feels that, because of the 1944 Education Act, many of its future members will continue in full-time education beyond the minimum school-leaving age and may not enter the industry through a craft apprenticeship. It also believes that the need for such an Institute is long overdue, and has pledged itself to work for a better understanding between all who are in any way connected with the management of a building site. It hopes to work amicably with all other associations and institutes connected with the building industry and, indeed, seeks the help of all who are interested in the education and qualifications necessary for site management.

A working party will be formed to draw up an entirely new constitution and to safeguard the interests of the present membership. The aim will be a fully-examined membership but, until an examination procedure can be initiated, site managers can be accepted on practice qualifications. Comments, advice and criticism will be carefully studied and this should be addressed to me at 60 Kerridge Court, Ball's Pond-road, London, N1.

F. H. GREGORY.

Competition News

Harlow Neighbourhood Unit

THE ASSESSOR'S AWARD in the Harlow neighbourhood unit layout competition will be announced on Monday next, May 15, at Harlow, when an exhibition of the designs submitted will be opened by Sir Keith Joseph, Parliamentary Secretary, Ministry of Housing and Local Government. About 50 designs were submitted.

Civic Buildings at Paisley

A PANEL of three assessors is to decide the winner of the architectural competition to be held in connection with the £2m. scheme for civic buildings at Paisley. The present assessor, Professor John Needham, FRIBA, of Sheffield University, will be joined by the president of the Royal Incorporation of Architects in Scotland, Mr. J. A. H. Mottram, ARIBA, and the professor of architecture at Liverpool University, Professor R. J. Gardner-Medwin, BArch, FRIBA, MTPI.

Civic Centre, Wolverhampton

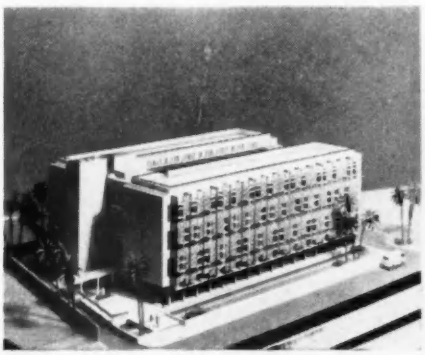
WOLVERHAMPTON CORPORATION is to organise an architectural competition for a £750,000 civic centre on a site including Queen-square. Premiums proposed are £2,000, £1,000 and £500. A survey of the site is now in course of preparation by the surveyor's staff.

R A Exhibition 1961

Office Buildings

Commercial Union Assurance Co. Ltd. Computer Unit, Exeter. H. A. J. DARLOW, D. WATNEY, EILOART, INMAN & NUNN. Drawn by Peter Sainsbury

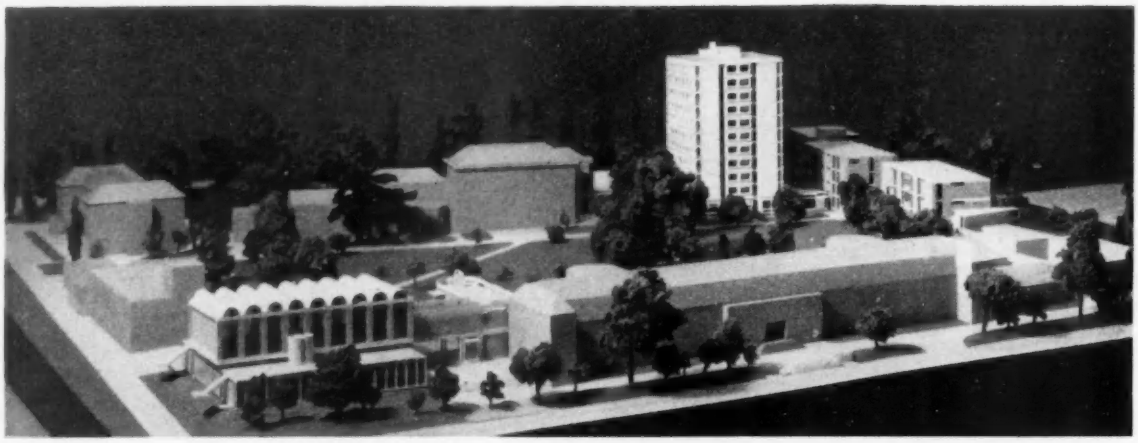
Royal Thames Yacht Club, from Hyde Park. GUY MORGAN. Drawn by E. J. Thring



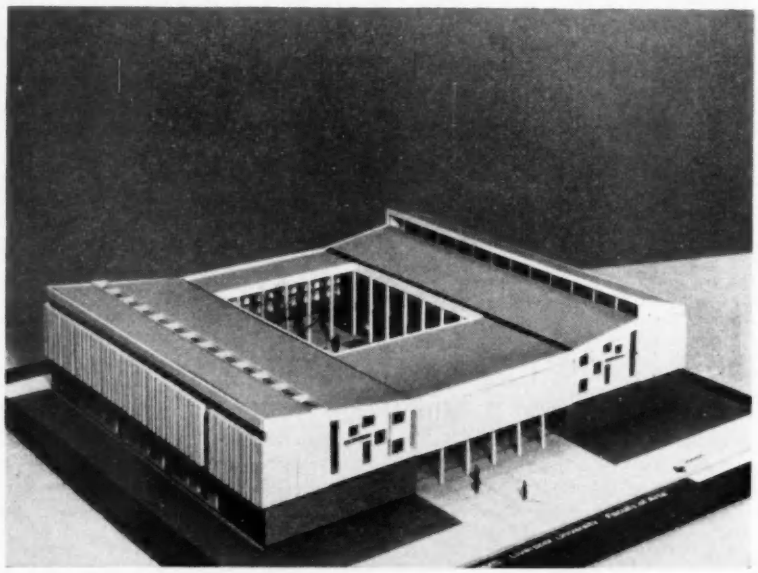
Gammon House, Bombay: New Headquarters of Gammon India (Private) Ltd. MICHAEL LYELL ASSOCIATES

R A Exhibition

School Buildings



Above, Furzedown Teachers' Training College, Wandsworth. LEONARD MANASSEH & PARTNERS



Right, Library and Lecture Rooms, Liverpool University Faculty of Arts. BRYAN and NORMAN WESTWOOD & PARTNERS

Below, Halls of Residence, Fourah Bay College, University College of Sierra Leone. FRANK M. RUTTER. Drawn by E. J. Thring

News of the Week

Midlands New Town Investigation

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Mr. Bates paid tribute to the work done by Area members in rebuilding the City—a view which was endorsed by Mr. Ian M. Leslie, Editor of 'The Builder,' in responding for the guests, felicitously proposed by Mr. D. O. May, Area junior vice-president. Before the end of the lunch, the Chairman announced, amid sympathetic applause, that Mr. Leslie Colls, a past Chairman, who had that day undergone a serious operation, was in good fettle.

St. Pancras Housing Department

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UNESCO Study Tour in Italy

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RIBA Drawings in USA

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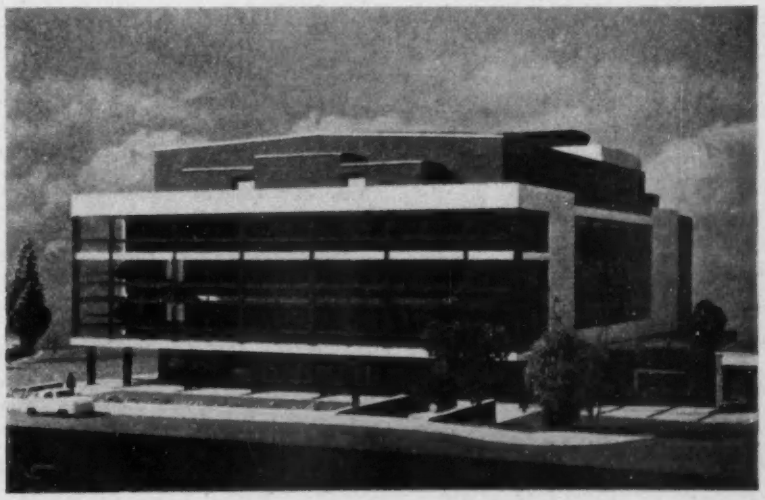
Cambridge Multi-Storey Car Park

CAMBRIDGE CITY COUNCIL on April 27 approved a proposal to build a multi-storey car park on a site in King-street. The greater part of the site is owned by Jesus College which put up strong opposition to the scheme. However, the council decided by a small majority to inform the college that they proposed to make a compulsory purchase order for the land. An outline scheme for the car park, with shops and a petrol filling station on the ground floor, will go ahead subject to a report on finance. During recent negotiations the college authorities told the council that they could not agree to the scheme because it would be incompatible with the university's suggestions, published earlier this year, for the large-scale development of a regional centre in the City-road area. The council have decided that the car park would be necessary whether or not the university's plan was adopted.

ILA Symposium Report

'THE URBAN SCENE—design for pleasure and hard wear in the landscape' was the theme of a symposium organised by the Institute of Landscape Architects and held at the Royal Institute of British Architects, 66 Portland-place, London, W1, on May 24 last. A report is available in which the three principal papers together with the subsequent discussions are given in full. The report concludes with brief summaries of the papers by Miss Margaret Willis, on her sociological investigations, with particular reference to current work with the LCC; Mr. David Randall, ARIBA, AILA, on his researches into children's play habits; and Mr. Bodfan Gruffydd, FILA, on the practical application of proven prototype answers with particular reference to Crawley New Town. The report of the symposium, which was under the chairmanship of Miss Jocelyn Adburgham, LRIBA, MTPI, FILA, may be obtained from the Insti-

CONGRESS THEATRE, EASTBOURNE.—*Work has just started on this theatre, which is designed to provide facilities for musical and variety shows, conferences, plays, meetings and lectures. The architects for the building, which will cost £387,980, are Bryan & Norman Westwood & Ptnrs. and the contractors are Walter Llewellyn & Sons Ltd., of Eastbourne*



R A Exhibition

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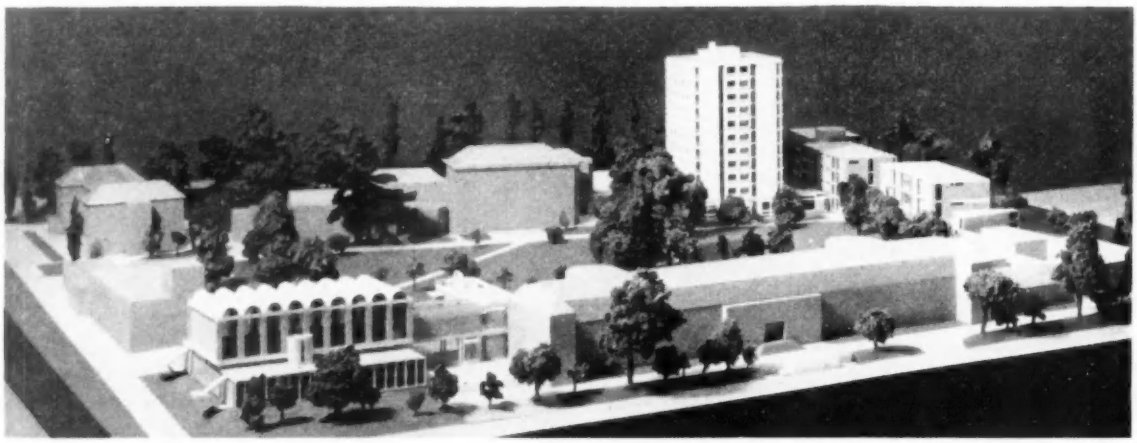

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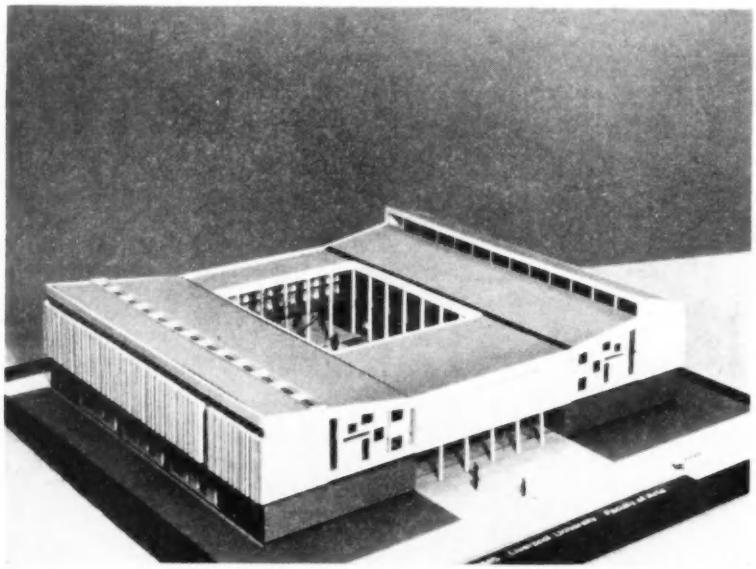

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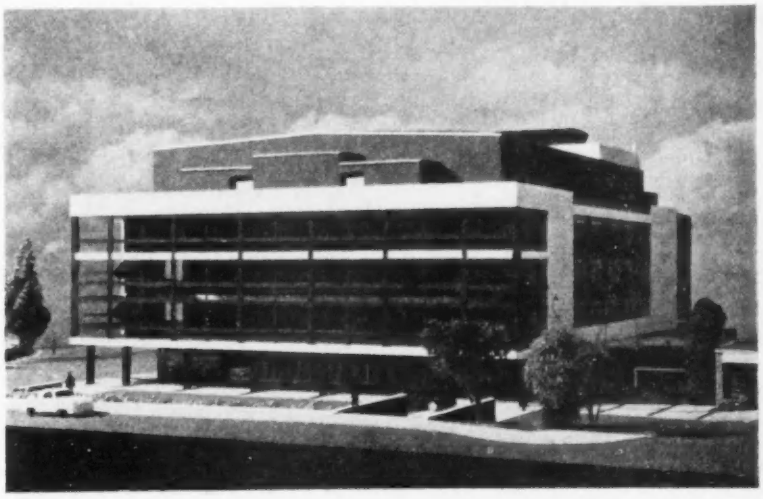
CAMBRIDGE CITY COUNCIL on April 27 approved a proposal to build a multi-storey car park on a site in King-street. The greater part of the site is owned by Jesus College which put up strong opposition to the scheme. However, the council decided by a small majority to inform the college that they proposed to make a compulsory purchase order for the land. An outline scheme for the car park, with shops and a petrol filling station on the ground floor, will go ahead subject to a report on finance. During recent negotiations the college authorities told the council that they could not agree to the scheme because it would be incompatible with the university's suggestions, published earlier this year, for the large-scale development of a regional centre in the City-road area. The council have decided that the car park would be necessary whether or not the university's plan was adopted.

ILA Symposium Report

'THE URBAN SCENE—design for pleasure and hard wear in the landscape' was the theme of a symposium organised by the Institute of Landscape Architects and held at the Royal Institute of British Architects, 66 Portland-place, London, W1, on May 24 last. A report is available in which the three principal papers together with the subsequent discussions are given in full. The report concludes with brief summaries of the papers by Miss Margaret Willis, on her sociological investigations, with particular reference to current work with the LCC; Mr. David Randall, ARIBA, AILA, on his researches into children's play habits; and Mr. Bodfan Gruffydd, FILA, on the practical application of proven prototype answers with particular reference to Crawley New Town. The report of the symposium, which was under the chairmanship of Miss Jocelyn Adburgham, LRIBA, MTPI, FILA, may be obtained from the Insti-

CONGRESS THEATRE, EASTBOURNE.—*Work has just started on this theatre, which is designed to provide facilities for musical and variety shows, conferences, plays, meetings and lectures. The architects for the building, which will cost £387,980, are Bryan & Norman Westwood & Ptnrs. and the contractors are Walter Llewellyn & Sons Ltd., of Eastbourne*



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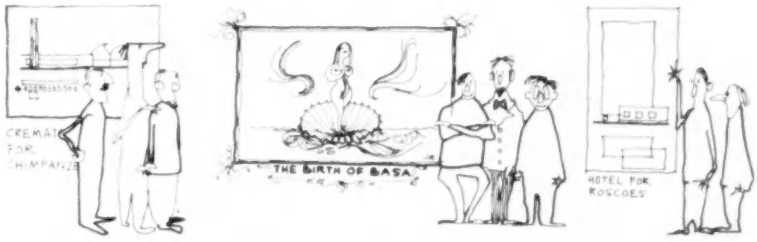

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Students of McGill University School of Architecture, writing in the March issue of the 'Royal Architectural Institute of Canada Journal,' suggest that 'in school we must clarify for ourselves objectives and principles as we learn to assume professional responsibility. If the leaders of the profession are in the dark, who,' the students ask, 'is to guide us in our pursuit? We must try to find out the reasons for the apparent lack of direction in architecture.' One of the reasons for this state of affairs is the increasing complexity of civilisation due to technological developments. The students of McGill cite also mass culture, mass communications, the emphasis on production and consumption, and a rate of urbanisation never anticipated. Condemning exhibitionism and false prestige symbols which lead to an empty rationale of forms, and preposterous and inadequate housing in cities strangled by traffic, the students put forward their views in a critical analysis of current architecture.

Such statements as: 'The schools disguise architectural education as simply a study of forms that require no serious effort in any other discipline'; 'the students are in an artificial dreamland, wildly emotional'; and 'the schools do not provide close and lengthy contacts with leaders in active private practice,' epitomise the serious rethinking that is going on both in England and in Canada in the realm of architectural education.

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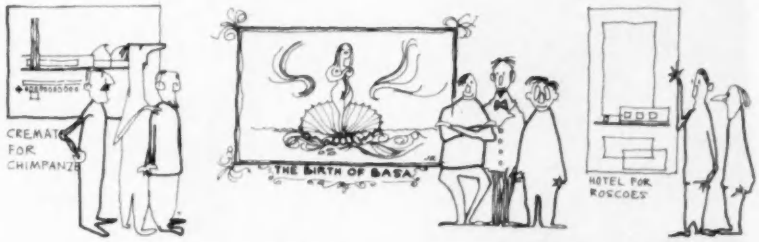

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Form and Reform

THE ASCENDANCY of the British Architectural Students' Association is a revolution in which the accepted principles and standards of education are being seriously questioned by the students and some of their teachers. It is not merely coincidental that the profession itself, hitherto irresolute on the question of active integration with other principals concerned in building, is now beginning to think in terms of 'groups' or 'teams'; indeed one or two well-known firms have already taken the initiative in this respect.

Students of McGill University School of Architecture, writing in the March issue of the 'Royal Architectural Institute of Canada Journal,' suggest that 'in school we must clarify for ourselves objectives and principles as we learn to assume professional responsibility. If the leaders of the profession are in the dark, who,' the students ask, 'is to guide us in our pursuit? We must try to find out the reasons for the apparent lack of direction in architecture.' One of the reasons for this state of affairs is the increasing complexity of civilisation due to technological developments. The students of McGill cite also mass culture, mass communications, the emphasis on production and consumption, and a rate of urbanisation never anticipated. Condemning exhibitionism and false prestige symbols which lead to an empty rationale of forms, and preposterous and inadequate housing in cities strangled by traffic, the students put forward their views in a critical analysis of current architecture.

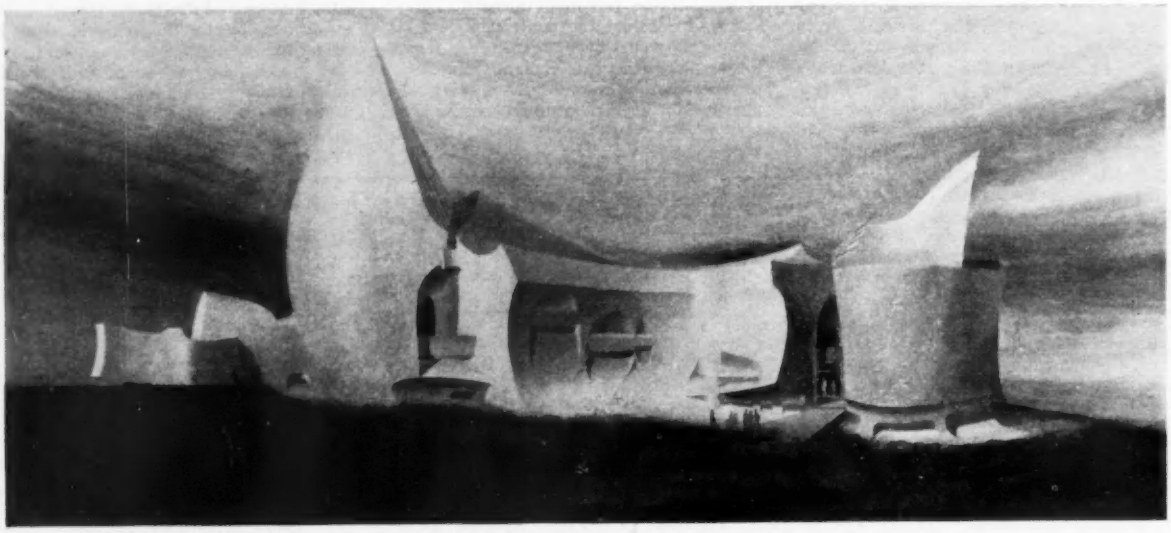
Such statements as: 'The schools disguise architectural education as simply a study of forms that require no serious effort in any other discipline'; 'the students are in an artificial dreamland, wildly emotional'; and 'the schools do not provide close and lengthy contacts with leaders in active private practice,' epitomise the serious rethinking that is going on both in England and in Canada in the realm of architectural education.

CICERO

Thesis Design

Episcopalian Church, Bloomfield, Michigan, USA

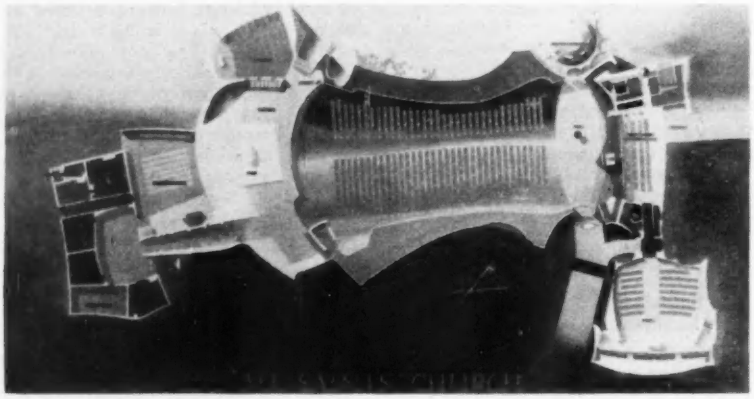
JOHN G. PICKLES, *fifth year, Liverpool School of Architecture*



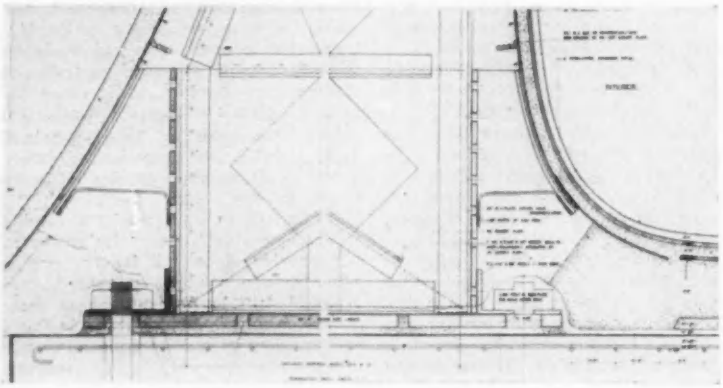
south-east elevation

Awarded First Class Honours and Sikorski Prize for Interior Design in 1960

below: plan



below: sectional detail



THE STRAIGHT LINE is accepted as the achievement of man in stubborn defiance of nature. In this there is an apparent conceit antipathetic to the prime concept of church building, that of humility. This conceit is evident in the formed materials of the interior, used to stimulate emotion by visual impact. It follows that the internal space is the all-important factor in the design. This space is no longer dictated by the limitations of materials imposing a continuance of rectilinear form.

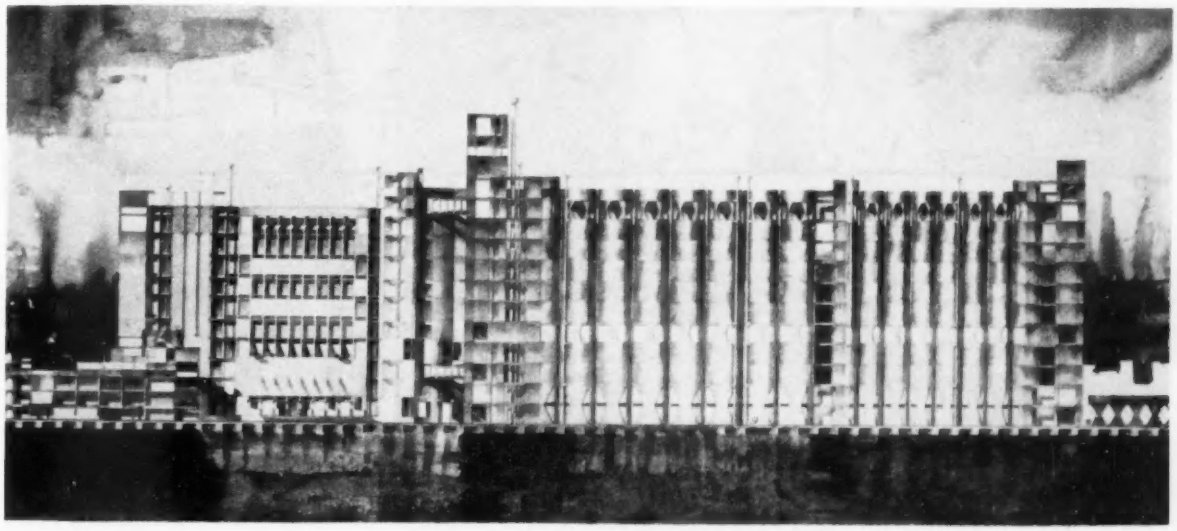
The problem attempted was to design purely a space which is appreciated regardless of the material presence of the envelope. This was the motivating principle in the design. The space was modulated by light rather than material, and no pattern or texture was used on any surface except the floor.

The nave is constructed of a series of lattice steel portals enclosed by two shells, inner and outer, of $\frac{3}{8}$ in. mild steel bar, expanded metal, and 3 in. of concrete. The designed inner and outer spaces model these two envelope shells. The definition of the curved surface was determined by a grid system of correlated vertical and horizontal sections.

Thesis Design

Flour Mill at Birkenhead

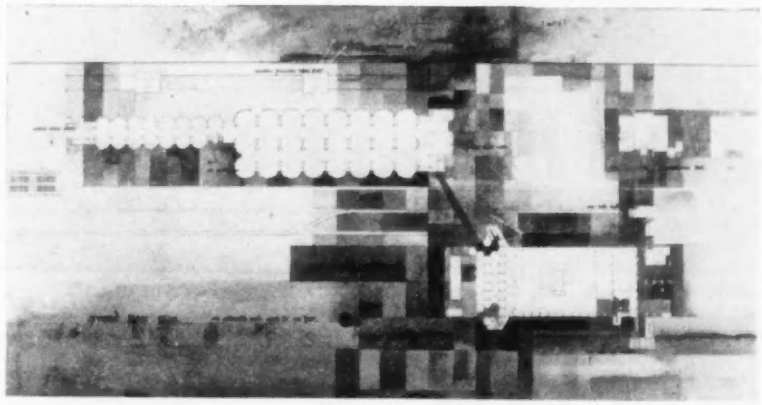
GRANVILLE T. D. LEWIS, *fifth year, Liverpool School of Architecture*



modelling of the main (seaward) elevation

Awarded First Class Honours and Reilly Medal and Prize in 1960

below: ground floor plan and general layout

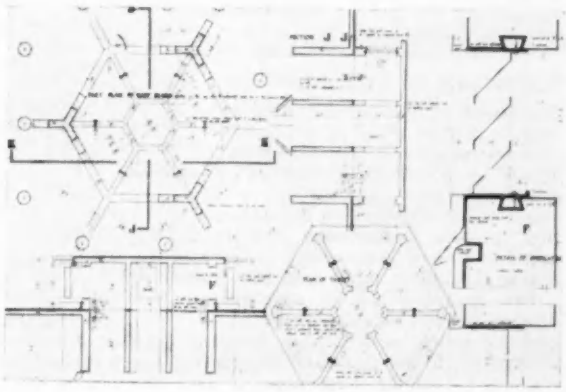


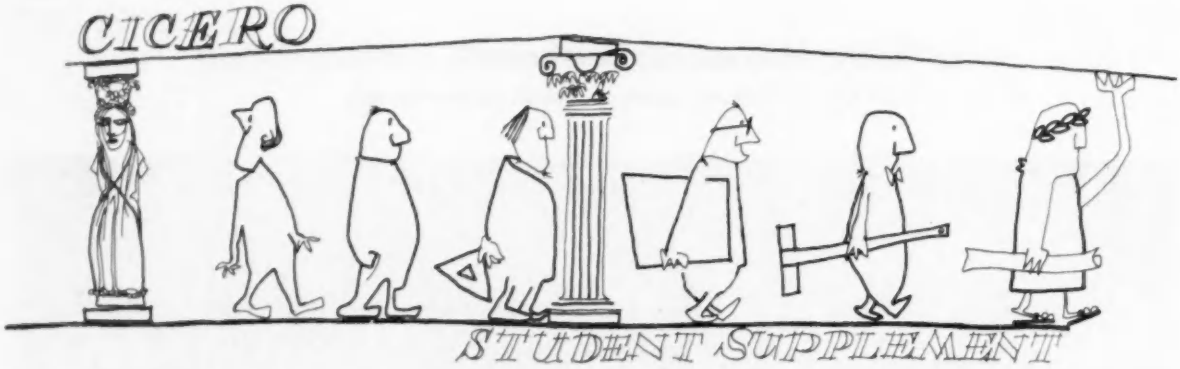
A FLOUR MILL must be adaptable to changing methods. That is to say, the building shell must not inhibit changes of plant and equipment. This requirement could give rise to a dull and negative structure which is not consistent with the character or importance of the industry. There are, however, certain basic requirements for milling wheat which will not change; the grist has to be stored in quantity, it has to be cleaned, milled, and stored as flour.

The volumes and the supporting structure generated in fulfilling these requirements, and the means of construction control the appearance of the building. The forces involved in a building of this size must be solved simply, and the modelling is achieved by exploiting a very simple supporting structure in a way appropriate to the function of any part of the building.

The scheme is disposed on the site maintaining a particular relationship between plant in different buildings, but with the silo and intake plant close to the ships' mooring and providing for through road and rail traffic past the intake and discharge points. The building exemplifies the industrial use of concrete in the 'functional tradition.'

below: working detail of precast concrete roof turret





Manchester Awards

THE SENIOR DESIGN PRIZE (silver medal), awarded by the Manchester Society of Architects to students of Manchester School of Architecture and Town Planning for the 1960-61 session, was taken by John E. Pickup. The junior design prize (bronze medal) was awarded to G. F. Oldham whose entry for the President's Essay Prize was highly commended. The latter prize went to Peter R. Lomax for his essay 'A Prospect of Bell Towers.'

News from the Bartlett

BROWSING THROUGH the current annual report of the University College, London, we learn that the Bartlett School gained the three top awards in the 1960 annual competition between French and British schools on a common design subject. G. Thorpe, a fourth year student, took first place, the second and third being won by G. John and R. J. Faircliff respectively.

* * *

A FRENCH GOVERNMENT SCHOLARSHIP has been awarded to L. M. Hellman (fourth-year degree student) to enable him to study for a year at L'Ecole Nationale et Superieure des Beaux-Arts in Paris.

* * *

WE NOTE WITH INTEREST that the experiment—carried out for the first time during the 1959-60 session—of inviting distinguished architects to advise students on subjects set by the school was a success.

* * *

AMONG the 152 students who attended the school during the 1959-60 session, 50 were taking degree courses, 66 the diploma course, and 31 the certificate course in decoration.

Scholarship for Draughtsmanship

THE HOUSE OF THE FUTURE, embodying, perhaps, a solar energy plant, and other imaginative ideas, is the subject set for design by architectural students in a newly endowed scholarship. 'The Staedtler Scholarship for Draughtsmanship' is open to final-year students at technical colleges and schools of architecture throughout the United Kingdom.

The sponsors, leading suppliers of drawing pencils, offer the winner a post-graduate course at a German technical university. If the successful student is without a working knowledge of the German language, the award will include special tuition. All fees, board and lodging, and travelling expenses will be paid. The alternative first prize is a cash grant of £250. There will be a second award of £100 and a third prize of £50.

Quality of draughtsmanship, combined with the most outstanding design will determine the awards, and to provide an all-round opportunity for promising designers, engineering students also have been invited to take part. Entry forms and full details may be obtained from college and school principals. The drawings can be sent in at any time but must be received not later than July 14.

Student-Designed Housing

ADRIAN STUNGO, our Edinburgh correspondent, reports that thirty houses at Musselburgh, Midlothian, designed jointly by second and third year degree students at Edinburgh College of Art, School of Architecture and the Department of Architecture, University of Edinburgh, are being officially opened today (May 12) by the principal and vice-chancellor of the University, Sir Edward Appleton. The houses have been built for the Scottish Special Housing Association Ltd.

Students from recognised schools of architecture have been invited to submit items of general interest concerning school and society activities for publication in future supplements. Items for the next issue should reach us not later than June 1.

Tite Prize Competition

OF THE SEVENTY-THREE esquisses submitted by United Kingdom competitors in the Tite Prize 'en loge' competition the RIBA jury were unable to recommend any to proceed to the final drawings stage.

Soane Medallion Competition

OF THE SEVENTY-SEVEN COMPETITORS from the United Kingdom who took part in the Soane Medallion 'en loge' competition the following have been selected to proceed with the final drawings: J. A. Burman (Birmingham School of Architecture), John H. Cooper (Oxford), John Frisby (Regent-street Polytechnic, London), Brian Godward (Leeds), D. V. Hamilton (Dundee), J. K. Houghton (Birmingham), J. C. Knowles (Nottingham), J. H. Moore (Leeds), John Rockliff (Leeds), Robert Smart (Northern Polytechnic, London), M. L. Smith (Oxford), and W. F. Stoner (King's College, Newcastle-upon-Tyne).

Natural Perspective

JAMES LAST approaches his subject from the viewpoint of natural pictorial vision, the fundamental conditions of this determining the geometry of the constructions employed. The circle and the ellipse—that illusive ellipse—which occur widely in pictorial representation are given special and somewhat rigorous attention. Shadows are touched upon very briefly since, rightly, the author believes that they require only an intelligent application of ordinary linear rules. Observations on reflections and refractions touch on two very interesting fields and will serve as a useful guide to further study. Finally, there is an interesting chapter headed 'Remote V's' which deals with those vee points that insist on planting themselves outside the window or down in the cellar. The author suggests a method of bringing them under control.

To show continuity between the applications of successive laws, a single structure is evolved from one line. In this way the various devices involved in straight line perspective are exemplified in association, having already been separately presented.

Two valuable appendices provide fully worked out examples which show first that the section of a slant cone, between base and apex, is eliptical; and second, how to draw the principal axes of an ellipse, given two conjunct semi-diameters. The author points out in his concluding notes that there is no short cut to a comfortable familiarity with practice other than practice, practice, and more practice. In this slender volume Last has made a study of enough applications of the principles to ensure mention of all the fundamental forms for which rigorous theory can usefully be provided. A very large and cumbrous volume would be required to give examples of the many diverse instances which could be encountered. A basic theory in essential detail—ideal for busy students.

NATURAL PERSPECTIVE. By James Last. (London: Sir Isaac Pitman & Sons Ltd.) Price 21s. net.

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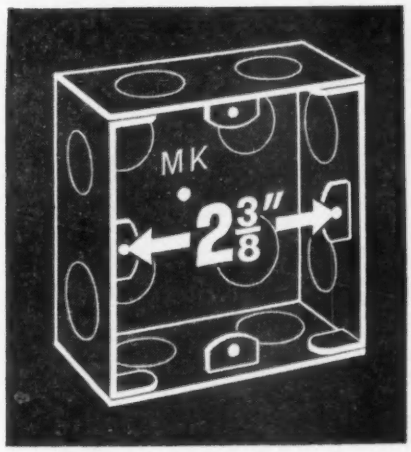

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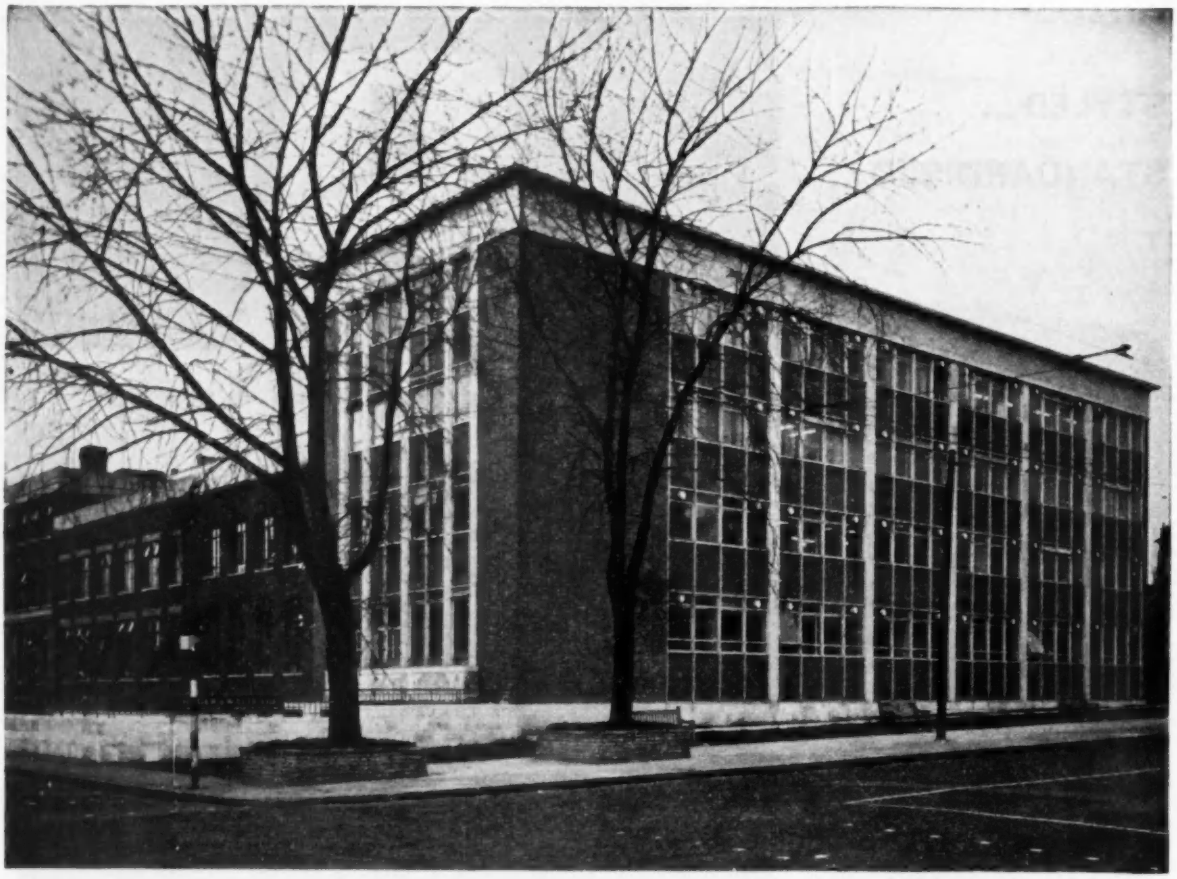

Architect: J. Francis Smith, F.R.I.B.A., F.R.I.C.S.

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More Everyday Things

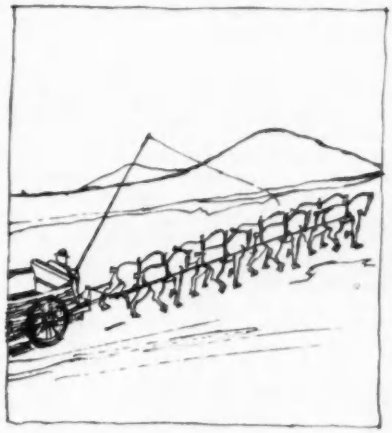
BY ARTHUR W. KENYON, CBE, FRIBA

41. The Team

I ONCE FOUND MYSELF the owner of a horse which just would not move an inch when I was mounted. I tried everything: cajolery, affection, sugar; nothing would avail. I could sit patiently in the saddle for hours in an attempt to overcome his apparently stubborn will, but it was no good. He was not stupid nor vicious, and he appeared to bear me no ill-will: he would not go. One day, when I was mounted, still trying to persuade him out of his standstill strike, a group of riders came along, and without more ado he started happily off taking me along with them. As soon as we became separated from the party he stood still again, and I had the ignominious task of leading him home. Perhaps I was the stupid one, for it had taken me all this time to realise that he had been trained in a team and had no idea of working on his own.

This little parable occurred to me as I read of some of the latest enterprises in professional team work. More and more we work in teams. The LCC seems particularly team-minded in its architectural projects. I am always fascinated by the groups of architects who cluster together round models and drawing boards for the Press when any of the more popular schemes are being brought to the attention of the public. 'Members of the design team who have worked on this project for the last *x* years, reading from left to right are . . . . etc.'

The latest team is that of the collective



partnership of architects and quantity surveyors who have sunk their personal identities in an anonymous group title with the intention of eventually including all the professions connected with the design of buildings. I am wholeheartedly for this idea of comprehensive practice. There has been much talk about it and around it and I have nothing but admiration for those who have had the courage to start.

I have written of this before in connection with the builders' package deal, and I am sure I shall write of it again and yet again. In our complicated modern building world, it is the only way we can hope to offer prospective building owners an efficient professional service, and the sooner this is generally acknowledged and a comprehensive scale of fees established, the greater the respect we shall earn from our clients.

If we are looking to the future, it seems we must no longer expect to work as individuals, and when we engage staff we must think of their place in the team and the contribution they have to make to it, rather than of merit as an individual. Occasionally, no doubt, individual genius will assert itself, but for the rank and file of us we must learn to work in teams, and when an occasional genius does rise in our midst we must make sure that, like my horse, he is trained to work with the team.

Current Exhibition

New Roads for London

THE EXHIBITION sponsored by the LCC featuring the road programme for the County of London is on view at Charing Cross Underground Station until May 19. It is well designed, interesting and visually exciting, and contains models of various well known development projects, photographs of work in hand, and drawings of the more general road development programme for the future. Exhibitions are intended to give the viewer in a very brief period of time an appreciation of a particular series of ideas—the idea behind them is very like the presentation of ideas in a film. To take this analogy a little further in terms of this display, the images and the editing are excellent but the script not quite as clear as it might be. In consideration of the latter there had to be condensed a fantastic amount of detail.

The first sequence attempts to give an appreciation of what road development is going on at this moment. One point put forward here is worth considering when next confronted by a large hole in the road, and it is that it is considerably more complicated to construct a road in a city than elsewhere. There could have been more photographs of road development, but then these usually turn out like the photographs of a surgical operation, and are just about as comprehensible to the layman. This does not give much scope for the dramatic.

The next sequence concerns the future and contains a map of London with the major pattern of roads marked on it. This is essential if one is to appreciate the point that, although the bits that are being developed appear to be odd and disjointed, they do belong to a complete scheme. One point that is put over many times in the exhibition is that whatever development is carried out it will have to be on the basis of scientific survey and analysis. It is simple enough for anyone to think boldly and dramatically how to solve the problem of traffic in London, but only a design based on such surveys has the slightest chance of solving a problem that is not completely evident until such surveys are carried out.

Many of the points that are made concerning the policy that will be adopted could be called truisms if this exhibition were designed entirely for the expert, but on the other hand a clear statement of some of these aims might well be, and already has been, missed out of road design schemes. Some of these points are well worth mentioning again here. 'Human needs must not be disregarded.' Without sufficient survey information it could happen that a community might be cut in half by a trunk road. Again, 'An efficient public transport system must be maintained.' Clearly an alternative to the private motor car is necessary purely on an economic basis; and 'working hours staggered.' It would be useful, one would have thought, even on the basis of money taken over the counter, for shops to work two shifts. Truisms, perhaps, but all the points presented are definitely valid.

One of the aims of this exhibition is to attract staff to the LCC to help carry out this programme and to this end there is a wall devoted to a series of illustrations showing each stage or operation that is involved in the development of a piece of road. This is extremely interesting. Certainly it is an over-simplification, but here is an attempt to show the machine at work. The detailed knowledge required to complete the cycle from the initial survey to the completed road spans about a dozen professions. Immediately one's mind is full of questions, such as, how do the professions communicate information to each other? Do all the professions understand what the others are doing? It would make an interesting object for a management study.

As one walks from the exhibition the reassurance gained from the fact that £200m. will be spent on the roads of London before 1980 begins to fade. This amounts to just over £10m. a year. What modern factory ever spent such a small percentage of its total fixed capital on the moving of goods, let alone the movement of its personnel?

PETER HOWELL

Art Workers Guild Master Elect

SIR GORDON RUSSELL, CBE, MC, RDI, FSIA, who was nominated for election as Master of the Art Workers Guild for 1962 at the ordinary meeting on April 7, was, in the absence of other nominations, declared elected.

High Buildings and Aesthetic Standards

Minister of Works' Address to Structural Engineers

SPEAKING at the annual dinner of the Institution of Structural Engineers at the Dorchester Hotel, London, on May 5, the Minister of Works, LORD JOHN HOPE, MP, said that his Department had now been offered a new problem in regard to tall buildings which would put them on their mettle. 'For technical reasons which I will not claim to understand,' he said, 'the Postmaster-General requires a tower over 500 ft. high in Bloomsbury.

'What is more he wants to put a considerable weight of electronic equipment quite near the top of it. To anyone who cares deeply, as I do, for the character of London and of its various districts this is a challenge indeed. It offers an opportunity to show what careful and imaginative design can achieve, even in so difficult a problem as this. I do not know whether we shall be judged to have succeeded, I hope we shall, and I am sure that this challenge is worthy of our best efforts.'

Their efforts, the Minister continued, would be judged by standards of criticism which, so far as high buildings were concerned, had risen appreciably in recent years. This rise in aesthetic standards was one to which the structural engineers' profession had made a notable contribution.

'I am afraid I cannot avoid in a speech before this audience a reference to the subject of economy,' the Minister went on. 'There is, I know, no subject more calculated to induce a careful study of the detail of the decoration on the ceiling. But it is, of course, a truism that our standard of living is largely built up from the innumerable small improvements made over the years by the patient labours of engineers trying to do a little more with a little less. In this I would certainly include structural engineers though I know they face a peculiar difficulty.

'Perhaps I might put it like this. A shopkeeper planning an organisation to ensure that he does not run out of stock will feel content if he is assured that on the mathematical probabilities he will only run out on one day in a thousand. A structural engineer assured that his building will only collapse on one day in a thousand will feel less happy. It is that extra .1 per cent of assurance which has to be bought with so much labour and care when structural standards are under review. Nevertheless, very considerable economies have been achieved since the war to which, I am happy to say, my Department has made a contribution of which it need not be ashamed. We are continuing to study these problems, particularly with relation to the usage of office buildings.'

The Minister added that another means, of course, of achieving economy in construction was by the use of new materials or new forms of construction. He understood, for example, that increasing use was being made of the hyperbolic paraboloid for roof construction, which he gathered was the 'name of a gracious curve which relieves the rectangular monotony which otherwise threatens to beset modern architecture.'

Traffic Study Group Established

'Ulster Can Lead the World'

SIR HERBERT MANZONI, president of the Institution of Civil Engineers, speaking at a dinner in Woodburne House Hotel, Dunmurry, Belfast, on April 28, told members of the Northern Ireland branch that if they had the courage, were prepared to spend the money and allot it in the right places, then Northern Ireland could be ahead of the world in meeting traffic problems. He was commenting on the decision taken at a meeting of the Association in Belfast earlier in the day to set up a traffic engineering study group in Northern Ireland.

'I think you would be very wise to make a start here,' Sir Herbert said. 'If you do, you will be ahead of us because our traffic is much more intense than yours and you will therefore get a little time in hand in providing a solution. It is, however, no good doing this unless someone is prepared to carry out the schemes which you suggest. Every country in the world is well behind with this problem. New York, where they have spent many millions of pounds on roads, is perhaps the worst. If it is proposed to tackle this matter in a big way, as it will have to be if you are dealing with high intensity traffic which has not yet come to you in Northern Ireland, but which will come, you must popularise the methods which you wish to adopt in the eyes of the public, for if they do not approve you cannot use it.'

Hammersmith College of Art and Building

Address by ISE President

A MEETING was held at the Hammersmith College of Art and Building, on April 19, when the President of the Institution of Structural Engineers, LT.-COLONEL G. W. KIRKLAND, MBE (MIL), addressed the pupils. Mr. Frederick S. Snow, a governor of the College, was in the chair, supported by Mr. Edwin Rice, the Principal. The address by the President was extremely interesting and highly successful and over 120 students were present.

MR. SNOW, in his report on the College's activities, referred to the encouraging fact that: 26 students were successful in obtaining exemption from part 1 of the Institution of Structural Engineers' examination and were awarded the College diploma; 12 students were successful in obtaining exemption from the Graduateship examination; 14 students had passed the Associate membership examination; 11 students had passed the graduateship examination; and 1 student had passed the City and Guilds examination in Concrete practice and had, in fact, obtained the highest marks, thereby receiving the Cement and Concrete Association's prize.

The PRESIDENT of the Students' Union and MR. ATKINS recorded a very warm vote of thanks to the President of the Institution of Structural Engineers for giving so much of his valuable time to the College and for making the meeting so successful.

Consultative Committees' Conference

State of Industry Discussion

THE FIFTH ANNUAL CONFERENCE of chairman and secretaries of regional joint consultative committees of architects, quantity surveyors and builders was held at the RIBA, 66, Portland-place, London, W1, on May 3. Mr. George Grosvenor, CBE, was in the chair.

A full discussion on the present state of the building industry took place. All regions reported a very heavy load of new work which showed no signs of slackening. This was leading in most areas to labour shortages, especially of craftsmen. The large number of major projects—power stations, motorways, major industrial developments—were in many areas delaying progress on small and medium size projects. Although it was realised that building was essentially a service industry and must accommodate itself to rapid changes in demand without reliance on any artificial control of the volume of work, several delegates expressed the view that the Government should have regard to the effect on local resources of men and materials when scheduling the start of major works. The conference recommended that the National Joint Consultative Committee should attempt to take stock of the building industry's position in the national economy and the future capacity likely to be required.

The need for specific advice to the industry from the National Joint Consultative Committee on how urgent projects should be handled was one of the main topics of discussion. Orthodox procedures were often inappropriate when a client, usually for good economic reasons, wanted a job built very quickly. The industry used many different unorthodox procedures to satisfy such clients, but they were not always successful. A rationalisation of procedures, and in particular some means of combining the speed that results from negotiating a contract with an element of competition, was needed. The conference endorsed the proposal that the National Joint Consultative Council should examine this problem.

Joint Training

Lively discussion centred round the report from the Eastern Region of a conference on joint training and the news that the National Joint Consultative Committee had been advised by its officials to establish a representative committee under an independent chairman to make proposals for joint training before qualification. The meeting closed with a very warm vote of thanks to Mr. George Grosvenor for his conduct of all five conferences which have so far been held.

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Law Reports

Builders' Successful Claim Against County Council; Contractors Lose Appeal Against Damages Award

Chancery Division, before Mr. Justice Pennycuick

A. Roberts & Co. (Holdings) Ltd. v. Leicestershire CC

MR. JUSTICE PENNYCUICK, in the Chancery Division on May 3, upheld a claim by A. Roberts & Co. (Holdings) Ltd., building contractors, of Eccleston-street, Victoria, London, against the Leicestershire County Council, for rectification of a contract for the building by the company of Hinckley Burbage Secondary Modern School.

The judge ordered that September 30, 1955, be inserted in the contract as the completion date for the work, in place of September 30, 1956. The County Council had asserted that the latter date was correct, and the one which had always been intended.

His lordship said that the council had accepted the company's tender, in which the company undertook to complete within 18 months, but the council had inserted in the contract a completion date which extended the period to 30 months. The company failed to notice the change.

The date had been altered for the benefit of the council and not that of the company, because if the company had made its tender on the basis of 30 months the price would have been higher.

'Apparently neither Mr. Ernest D. Smith, ARIBA (assistant county architect for the education section of the council) nor Mr. Charles Thornton (the progress officer in the architect's department of the council) considered that he was under any obligation to call the attention of the company to this change,' said the judge.

The question was: did Mr. Smith who had the handling of the matter know that the company believed that the period for completion was 18 months? In his lordship's judgment the facts gave rise beyond reasonable doubt to the inference that he did.

'Only if he was unusually stupid or unusually heedless could he have failed to understand, and I am satisfied that he was neither stupid nor heedless and that he did realise the company's mistake.'

It had been suggested that it would be inconceivable for an official in Mr. Smith's position, when he had realised the company's mistake, to stand by without bringing it to the company's notice; but after hearing Mr. Smith's evidence—and in particular his views upon the propriety of inserting a new date for completion in the contract without communicating with the company—his lordship was unable to attribute any weight to that argument.

'It is also contended that Mr. Smith had no motive in acting as he did. No one suggests that he had any corrupt personal motive, but as a loyal officer of the council he must have recognised that it would be extremely inconvenient if the contract were to go off, bearing in mind that the work under it must begin by the end of March in order to qualify for the Ministry grant.'

The issue depended upon the state of Mr. Smith's knowledge, and the judge did not feel himself concerned either to criticise or excuse Mr. Smith's conduct. He proposed to order that the contract be rectified, and that the county council pay the costs of the action.

Contractors Lose Appeal Against Damages Award

House of Lords, before Viscount Simonds, Lords Goddard, Morris, Reid, Tucker and Hodson

Braithwaite & Co. (Structural) Ltd. v. Caulfield

A 'SPIDERMAN' who was injured while working on the Ham's Hall power station, Coleshill, Staffs, in 1956, was subjected to unnecessary and unjustifiable risks in being required to use a device known as a Spanish windlass, said Lord Morris in the House of Lords on May 4.

The House dismissed an appeal by Messrs. Braithwaite & Co (Structural) Ltd., public works contractors, of Great Bookham, Surrey, from a decision of the Court of Appeal reversing a finding of Mr. Commissioner A. P. Marshall, QC (as he then was), at Staffordshire Assize and holding that Thomas Caulfield, 49, now of Jeffery's-road, Clapham, London, SW, was entitled to recover damages.

The appeal was heard by Viscount Simonds, Lords Goddard, Morris, Reid, Tucker and Hodson, all of whom agreed that it failed.

Caulfield conducted his own case before the Court of Appeal and again in the House of Lords.

LORD MORRIS said Caulfield was working 18 to 20 feet above the ground and using Spanish windlasses to level a framework which he was fixing to the building. The Spanish windlasses, consisting of three double wires, secured to the wall and to the framework, and three bars of wood were used to level the framework.

Caulfield was standing with his right foot on a nine-inch plank and his left foot on the toeplace of the platform when he felt it sinking. To avoid losing his balance he reached with his left hand for support and his thumb and third finger were caught in the windlass which was revolving very rapidly.

It was common ground that Caulfield in some way dislodged the lever which was fixed as well as it could be in the circumstances. As the majority of the Court of Appeal held, in the limited space available the use of the Spanish windlasses did subject the workman to unnecessary and unjustifiable risks.

His lordship added that it might be that in other places and circumstances they could safely be used, but in the present case it was not practicable to fix the tie wires so that the necessary measure of security was achieved.

The Commissioner took an unfavourable view of Caulfield as a witness, but that did not justify the inference, in the absence of any direct evidence, that he himself was negligent, even if he was momentarily clumsy.

Status of the Engineer

Plea for Simplification of Designations

'THE STATUS of the professional engineer in all fields of public life is nothing like as high as it should be,' declared LT.-COL. G. W. KIRKLAND, President, at the annual dinner of the Institution of Structural Engineers in London on May 5. 'I believe the failure to be our own fault, partly through the scatter effect of the large number of bodies which represent us,' he added.

To rectify the position, Colonel Kirkland suggested that members of the chartered engineering institutions should describe themselves simply as Chartered Engineers. Additionally, there should be an organisation to represent all chartered engineers to ensure their proper representation in the councils of the world. This did not call for the formation of yet another engineering body; the 'mother'—the Institution of Civil Engineers—should encourage her varied offspring and admit their spokesmen to her council on the basis of proportional representation.

It would, admitted Colonel Kirkland, require much patience to divert the 'mother' institution from 'take-over bids' and the like, but there were at least 100,000 members of chartered engineering bodies, thousands more qualified by university degree and experience who were not members of any engineering society, and many thousands more again qualified by examination and experience who were members of the non-chartered engineering institutions. The overall total of professional engineers might well approach a quarter of a million.

The profession of the engineer was the largest in the country. The BMA represented almost 80,000 doctors practising in practically every branch of medicine; chartered accountants numbered almost 43,000, while there were about 20,000 members of the Royal Institute of British Architects.

These professions enjoyed a recognised place in society; steps must be taken to ensure that in this age of the scientist and technologist the professional engineer was likewise accorded his rightful place.

Books Received

THE PUBLIC HEALTH INSPECTOR'S HANDBOOK. By H. H. Clay. (London: H. K. Lewis & Co. Ltd.) Price 55s.

HUTCHINS' PRICED SCHEDULES (1961). 17th ed. Compiled by Thos. V. Hutchins. (London: G. H. Lake & Co. Ltd.) Price 70s.

The Week in Parliament

From Our Own Correspondent

Plans for Hospital Building

A FIRM PLAN for five years ahead was as far as possible the intention of the Government in their hospital building programme, explained LORD NEWTON, the Government's spokesman, when the Lords debated the hospital service on April 26. For the later years, he said, it would be more adaptable to allow for developments.

He outlined to peers the steps which the Minister of Health had taken, including the system of cost limits which would be introduced in connection with the series of building notes the Department was now issuing. Eight building notes had been published already, he said. Number 1 had sold 4,500 copies and there was a second edition being printed. About 30 would be published in quick succession and they would be revised as often as necessary in the light of experience and changes of technique and medical developments and so on, and they would cover the main aspects of hospital planning and design.

In due course the Ministry would also be issuing building bulletins on selected departments which would be even more detailed than the building notes. Furthermore another series of publications would come out entitled 'Hospital abstracts' and they were based on the contents of many periodicals, books, reports and other material on hospitals and hospital services published in various countries.

Planning and Traffic Congestion

A MOTION calling upon the competent authorities to control street parking in their areas, to promote parking meter schemes and to facilitate the provision of off-street parking places and garages was carried unopposed in the Commons on April 28.

This motion was introduced by MR. VICTOR GOODHEW and it enabled MR. JOHN HAY, Parliamentary Secretary to the Ministry of Transport, to give a long, detailed exposition of the progress that has been made in various plans to ease traffic congestion, and to touch upon the planning aspect.

He said the broad position, taking the country as a whole, was that now most planning authorities required about one off-street car place per dwelling. 'It is our view,' he added, 'that all planning authorities should do at least that. I personally am a little doubtful whether those standards are quite adequate. We are moving very fast into the age of the two-car family, and that has to be taken into account by local planning authorities.'

With office building, in the LCC area the standard was one space per 2,000 sq. ft. of floor space, which was equivalent to providing a car park for about 7 to 9 per cent of office workers. The Ministry of Transport and the Ministry of Housing and Local Government had recently set up machinery to go into the question of car parking needs and standards more thoroughly. In future they would be taking a greater interest in that than perhaps had been the case in the past. The Ministry of Transport's long-term study group, under the chairmanship of Mr. C. D. Buchanan, would be looking particularly at the problem of planning cities to live with the motor car.

Mr. Hay began by asking what were the proper purposes of streets. There were two, he said. First, to provide for moving traffic and, second, to allow reasonable access to premises so far as that was consistent with the demands of moving traffic. The problem they faced was somehow to find a proper balance between the two. 'We believe that the correct solution is to be found in comprehensive control over waiting, a control which would be simple to understand and enforce; that parking should be allowed only where it does not interfere with moving traffic or access to premises; and that waiting, loading and unloading and so on should be allowed only where it would not unduly impede moving traffic.

'For that reason the Ministry had adopted as their policy the control of street parking on three principles—first, the principle of payment for parking on the street, the chosen instrument being parking meters; second, better enforcement of the law; and third, the encouragement of off-street parking provisions. He then went into details of progress in London and other areas.

MR. GOODHEW stressed that in large cities like London thought should first be given to the provision of multi-storey car parks on the periphery, somewhere close to railway stations and bus stops from which the motorist could reach his destination in the centre. MR. MARCUS LIPTON said that one of these days the Minister would have to make up his mind whether to allow any more cars to come into the centre of London.

Housing Subsidies and Tall Flats

ALTHOUGH he was resisting a series of Opposition amendments which sought to increase the subsidy for building tall blocks of flats, MR. HENRY BROOKE, Minister of Housing and Local Government, explained to the Standing Committee of MPs on the Housing Bill on May 4 that he was not resentful at the idea that there should be an incentive to a local authority in terms of building really high. That was what the subsidy structure now did.

The current subsidy structure was unchanged by the Housing Bill, and Mr. Brooke said he had heard no evidence to convince him that they could improve this structure and there was no ground for thinking that the excess cost in building high, compared with building low, had increased at all since 1956 when the present subsidies were fixed. He invited MPs, local authorities and local authority associations to submit any further evidence and he would willingly look at it because 'I am anxious to get this matter right.'

He was anxious to secure that they should not, as it were, bribe local authorities into building high, but they ought to be enabling local authorities, by the subsidy arrangements, to build high when they had a need to do so.

For the Opposition, MR. JAMES MACCOLL had contended that the Minister's attitude did not show any clear appreciation of the problems involved. There were, he maintained, good reasons for believing that the Minister did not like high building.

MR. BROOKE said he would not claim that at any one moment they had these subsidies for high building absolutely right. They now had a structure of subsidies comparable to the structure of a building under which the amount of subsidy payable rose according to the number of storeys.

He must rebut the charge by Mr. MacColl that he was against tall blocks of flats. Long before he became Minister he had urged people to get rid of the foolish prejudice against living in flats. 'A house suits some people better and a flat suits others better,' he went on. 'Not everybody is the same. But many towns and cities allowed the prejudice against flats to remain far too long after the war, when in London it had become accepted that they were good.'

Some years ago there was relatively little experience of building tall blocks of flats. Techniques had substantially improved and were improving all the time. He would certainly judge that the building industry would say that technical progress in the methods of building tall blocks of flats was going ahead faster than the technical advances in building ordinary houses. Anyone who had evidence to submit to rebut what he had said could send it to him and he would examine it. Such figures as he had tended to show that the cost per unit of accommodation in a tall block of flats was not now so far above the cost per unit of accommodation in a house or a three-storey block of flats, as it was a few years ago.

The Housing Bill

AN OPPOSITION amendment to increase the town development subsidy from £28 to £35 a dwelling was defeated in the Standing Committee of MPs, who are continuing to discuss the Housing Bill. The debate enabled some sharp criticism to be levelled at the Government for their overspill policy by Opposition members. On this occasion Conservative MPs had nothing to say and the rebuttal of the Opposition contentions came from SIR KEITH JOSEPH, Parliamentary Secretary to the Ministry of Housing and Local Government.

For the Opposition, MR. JAMES MACCOLL said that by and large nowhere had Government policy been a more pathetic failure than in their lack of energetic drive in the handling of the problems of overspill. Skelmersdale gave some indi-

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cation of a change of heart. Dealing with town expansion, he said the Minister had stood primly on the sidelines leaving it to the unfortunate local authorities concerned to try to reach some sort of agreement among themselves to solve this vital problem.

Mr. Maccoll later commented that the thing to be avoided above all was that there should be any 'apartheid' in the new towns, such as a development corporation estate, with its own standards of rent, accommodation and way of life, and a local authority estate removed from it so that there was no movement of people from one to the other. That was not the way to build up a healthy community. The Opposition felt there should be a substantial increase in the subsidy because of the especially difficult problems created by overspill.

'It is one of the things that those of us who like to play about with theories of planning delight in,' he commented. 'When we come to practice, it is very much more difficult to work out the problems involved.'

SIR KEITH JOSEPH said he agreed with all the speeches on the need for overspill. There was no more central theme to the housing problems. The Minister was determined to obtain more overspill arrangements by way of expanded towns and where it was shown to be necessary, by way of new towns, as was instanced by the Skelmersdale example which was now approaching inquiry.

He said the overspill site had to reconcile a number of interests. It had to be a place where work would be available, where the sacrifice of best agricultural land would not be necessary and where transport would be provided. They must not interfere more than was absolutely necessary with the priorities of the unemployment areas. So that it was not just a problem of good or bad will about overspill.

There was here an intensely difficult problem of Government. A series of 'shotgun weddings' would not achieve anything. There had to be some degree of 'courtship' between the exporting and importing authorities, and a 'marriage bounty.' The level of that formed the subject of the Opposition's amendment.

He would agree that the problem of getting some expanded or new towns was very urgent, but he would ask them to accept that urgent though this was at the moment, there were enough sites within cities with great housing problems to enable them to carry on for yet a few more years at the present rate of building. The effective maximum help under the Bill was being raised from £32 to £40 per dwelling.

Other Business

Additional Road Schemes

SIR BARNETT JANNER asked the Minister of Transport on April 19, in view of the fact that the total of estimated new commitments in respect of new construction and major improvement of trunk and classified roads given in Civil Estimates for 1960-61 was £66.85m. and had now been announced to be £98m., what additional schemes, with their cost, were authorised in that period.

MR. ERNEST MARPLES wrote: 'The most important schemes were the main Cheshire section of the Birmingham-Preston motorway and the Severn Bridge, which are estimated at £11.8m. and £15.8m. respectively. Additional grants totalling £5.5m. were also authorised for a large number of schemes on classified roads. The Estimates figure included sums for the purchase of land and preliminary expenses for trunk road and motorway schemes. These did not appear in the £98m., which covered scheme authorisations only.'

National Theatre Policy Unchanged

Although several pleas urging the construction of a national theatre on the South Bank were voiced in the Lords on April 20, the Government spokesman, the EARL OF DUNDEE, Minister without Portfolio, gave not the slightest indication of any change in the Government's attitude. He pointed out that the financial difficulty of agreeing to the proposal was not so much the capital cost as the possibility of an indeterminate annual liability which might run into a very large sum. So far as he knew, nothing had been positively proposed about that. He was sure that if anyone had fresh suggestions to put to the Chancellor he would be delighted to listen and give them close attention.

Underground Car Park Bill

The Hyde Park (Underground Parking) Bill completed its passage through the Commons on April 25. It now goes to the Lords.

New Telephone Kiosks

MR. TOM DRIBERG asked the Postmaster General on April 26 if he would consider, in consultation with the Council of Industrial Design, the desirability of commissioning a new design for the standard telephone kiosk.

MR. BEVINS: 'I am having prototypes made of a new kiosk. It has been designed by Mr. Neville Conder and approved for trial, by both the Council of Industrial Design and the Royal Fine Art Commission. I hope to put the prototype into experimental use by the end of this year.'

MR. DRIBERG wondered if this was the one about which an announcement was made in 1958. If so, would it not be possible to make slightly more rapid progress? The antique, archaic and quaint kiosk was still being put up in large numbers outside modern buildings where it looked rather incongruous.

MR. BEVINS said that this was the kiosk announced in 1958 and he confessed that this had had a somewhat chequered history. There had been a number of technical difficulties in connection with this prototype, the main one being to find some method of making the coin box part of the structure of the kiosk so that it could not be ripped out by all and sundry.

Modernisation of Post Offices

MR. BEVINS, Postmaster-General, told the Commons on April 26 that he hoped to modernise all their older public post offices, about 1,000 of them all told, in the next seven or eight years. In the current year he hoped to deal with about one hundred. Work on 25 had already started or was about to start, and plans for the others were well advanced. This work supplemented the ordinary Post Office building programme.

Restaurant in Radio Tower

A restaurant is to be embodied in the radio tower which the Post Office is to erect in Central London. This was announced by MR. BEVINS, Postmaster-General, in a written answer on April 26 to CAPT. W. ELLIOT, who considered this would be a unique addition to London's amenities.

MR. BEVINS said he had always felt that a restaurant in the tower would be a great attraction to the public and after further examination, the Minister of Works and himself had decided that it would be possible to include a restaurant without jeopardising the time-table for completion of the whole scheme.

*** The proposed tower was illustrated in 'The Builder' of February 10, 1961.—ED.

Essex Chalkpit Planning Inquiry

Replying to a debate on the Essex chalkpit planning inquiry case, the LORD CHANCELLOR (Viscount Kilmuir) said in the House of Lords on Monday that he was collecting the opinions of professional bodies concerned in the proposed rules of procedure for these inquiries. When he had done so, draft rules would be submitted to the Council on Tribunals. This would give an opportunity of considering the position of third parties like the neighbouring landowners in the chalkpit case.

There is to be an adjournment debate in the Commons on this subject on May 16.

Hospital Building Tenders

MR. JULIAN RIDSDALE asked the Minister of Health on May 8 what reply he had had to his letter to the North East Metropolitan Hospital Board concerning the review of their procedure to enable fixed price tenders to be accepted more speedily.

MR. ENOCH POWELL: 'I am telling hospital authorities generally that fixed price tenders should not be open for more than two months.'

Points From Replies

'We have no plans for a motorway between Bristol and Penzance.' *(Minister of Transport, April 19.)*

'Work on the Hyde Park underpass is proceeding according to plan. It should be completed by about the end of August, 1962.' *(Parliamentary Secretary, Ministry of Transport, April 19.)*

'The new three-year classified roads programme has been notified to highway authorities.' *(Minister of Transport, April 19.)*

Costs in the Building Industry

FMB Vice-President on the 'Old Inflation Bogey'

RISING COSTS and 'the old inflation bogey' were referred to by MR. W. A. MACKRIDGE, FIOB, MRSH, vice-president of the Federation of Master Builders, in his address to the Eastern Counties Regional Annual Conference at Great Yarmouth on May 6. 'After many trials', said Mr. Mackridge, 'we thought we had done with rising costs, and could see the way ahead to a period of steady prices for our work. That old inflation bogey, however, threatens again, and what is worse, the Government does not appear to help in any practical way.'

The speaker reflected on the deeper implications of the Budget—the threats of a tax on the numbers employed and the likelihood of 'ad hoc' changes in purchase tax—as being far from encouraging. The cost of nearly every prime commodity was again on the upward march, he continued, and there would still be more taxation levied on any profits the industry might be fortunate enough to make. 'All this must tend to push up prices for building work—certain public authorities have already brought back a rise and fall clause to their Conditions of Contract.'

Mr. Mackridge said that it was often claimed that building by municipally employed direct labour was an answer to high prices. This was the worst kind of nonsense, he said. Glaring examples of waste and inefficiency in local authorities' direct labour departments had only recently been reported in the National Press, and it was apparent that the final result of many of these 'commercial adventures' was just a bigger bill to the authority and higher rates to be paid by the long suffering public.

Mr. Walter Hide (left), the newly elected chairman of the Joinery and Woodwork Employers Federation, being welcomed to the chair by Mr. M. van Westerborg, who has relinquished the chairmanship after six years of office, at the Federation's annual general meeting on April 20

'The Government,' concluded the vice-president, 'should exercise stricter control of these wasteful ventures; and it could help us all by attacking the basic problem—the threat of rising costs of labour and materials.'

London Region's German Visit

A delegation of some 60 members of the Federation of Master Builders, mainly from the London Region, visited Berlin and Hambourg from May 4 to 11. In Berlin the party toured the Municipal Quarter, the Academy of Arts, the North-West curved bridge, the Autobahn Ring and the Opera House building.

Declarations of Pecuniary Interests

Discussion with MoH&LG

THE CHAIRMAN of the general purposes committee of the Bournemouth Corporation, accompanied by the town clerk and deputy town clerk, had a discussion, on May 4, with officials of the Ministry of Housing and Local Government about the effect of section 76 of the Local Government Act, 1933 (which deals with the obligations of members of local authorities at meetings when they have pecuniary interests in any matters under consideration).

The Ministry pointed out that judicial interpretation of the section had made it clear that remote or hypothetical interests did not place members under any disability. Experience of the operation of these provisions during the past 27 years, and the comparatively few cases in which proceedings had been taken in the courts for breach of them, did not indicate that, in practice, members of local authorities had found them onerous.

The subject is one of general concern to local authorities and it has received a good deal of attention by the local authority associations, including recent consultation with the Ministry. The Council's representatives accordingly propose to recommend that the matter should be put before the law and general purposes committee of the AMC.

Organisation of Sandwich Courses

Inquiry by National Advisory Council

THE National Advisory Council on Education for Industry and Commerce, whose chairman is Sir Harry Pilkington, have started an inquiry on the organisation of sandwich courses in technical colleges and other colleges of further education.

A sub-committee under the chairmanship of Mr. E. L. Russell, chief education officer for Birmingham, has been set up 'to examine the organisation of sandwich courses with a view to using college staff, equipment and accommodation and industrial training facilities to the best advantage; and in particular to consider "end-on" arrangements.'

The sub-committee are examining the various ways in which practical experience in industry is combined with academic study in technical college courses. These methods include the 'end-on' system under which two quite separate groups of students follow the same course, but use the college alternately, one group being in college while the other is in industry.

Any organisation or persons wishing to submit evidence to the sub-committee should write to the Secretary, National Advisory Council on Education for Industry and Commerce, Ministry of Education, Curzon-street, London, W1.

London Accident Prevention Group

Election of Officers

THE ANNUAL GENERAL MEETING of the London Building and Civil Engineering Accident Prevention Group was held at the Safety Centre, Horseferry-road, on April 19. Mr. J. A. Hayward, MBE, was in the chair. The meeting heard with regret the decision of Sir George Barnett to resign as president of the Group, but were cheered with the news that Mr. T. W. McCulloch, the chief inspector of factories, might be persuaded to take his place. The following officers were elected:

Chairman, B. A. C. White (Woodall Duckham); vice-chairman, R. A. Vickery (Taylor Woodrow); hon. secretary, E. E. Batty (Holland & Hannen and Cubbitts); hon. treasurer, G. H. Binks (Babcock and Wilcox); hon. auditors, G. Elmes and I. C. Ford. The committee comprises G. M. Barker (Howard Farrow), J. A. Hayward (J. Laing & Son), J. A. Riley (Higgs and Hill), A. R. Forrest (Youngmans), R. Edwards (SGB), F. E. Beaumont, E. Bateman (LCC), and R. Drage (Roolf Ltd.).

In his address to the meeting MR. MCCULLOCH gave the accident figures for civil engineering and building reported during 1960. There were 277 fatalities in a total of 20,584 reportable accidents, the highest ever recorded. The speaker suggested that although a variety of reasons could be put forward for these figures the basic one was the attitude of supervisors and operatives on the site.

Two other speakers, MR. O. D. W. PAYNE, MA, joint secretary, Regional Joint Council, and MR. P. ROOT, district secretary, AUBTW, stressed the need for closer co-operation and education if we were to bring about a reduction in the appalling figures issued each year. MR. VICKERY in his vote of thanks, chided both Mr. Payne and Mr. Root for not offering concrete suggestions in this respect.

Skelmersdale New Town Inquiry

THE MINISTER OF HOUSING AND LOCAL GOVERNMENT has appointed Sir Richard Manktelow to hold a public local inquiry into objections he has received to the draft order designating 4,029 acres of land at Skelmersdale, Lancashire, as the site of a new town. The inquiry will be held at the Town Hall, Sandy-lane, Skelmersdale, on May 31 and June 1 and 2, and if necessary, on June 6, 7 and 8.

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Local Government in Greater London

Town Planning Institute's Memorandum to Minister

The Town Planning Institute has submitted a Memorandum to the Minister of Housing and Local Government on the Report of the Royal Commission on Local Government in Greater London. The Minister has replied that he is now considering the Memorandum with his colleagues and would take into account the views expressed by the Institute. Following is the text of the Institute's Memorandum:

THE INSTITUTE is impressed, as all must be, with this clear statement by the Royal Commission of the problems which face Local Government in Metropolitan London. The Institute is in full agreement with the aims of the Commission, and notably with those the Commission put first: to give new vitality to Local Government and to secure the unified planning of Greater London.

The Commission's solutions, however, are confined substantially to the built-up area of London and its suburbs. For the wider problems of regional planning, although the Commission recognise them as fundamental, they appear to offer no solution consistent with their primary aims. It was to these regional problems that the Institute's own evidence was directed, and it finds support for that evidence in the Commission's own analysis.

As the body of professional opinion directly concerned with these problems, and apprehensive of the disastrous consequences from any failure to provide adequately for their solution, the Institute feels bound to submit to the Minister certain particular points which, in the Institute's view, merit his special consideration.

Among the problems which the Royal Commission appear to leave largely unsolved are the following:

Unsolved Problems

(i) The proper distribution and balance of workplaces and homes throughout the region: the regional programming of housing and overspill and the financial problems involved therein.

(ii) Ultimate preservation of the Green Belt round London and between country towns on its periphery, the protection of areas of special beauty and importance, and the provision of adequate recreational facilities for the region as a whole.

(iii) Regional planning of an improved system of communications both for public and private use (including large-scale car parking).

(iv) The location of major projects such as airfields, sewage works, reservoirs, power stations, wholesale markets and sites for refuse disposal.

(v) The programming of mineral working and the reclamation of land left derelict.

(vi) Determination of priorities and programming of capital expenditure on other services within the region for the benefit of the region as a whole.

(vii) The need to maintain a continual watch on changing conditions throughout the region, with adjustment of the plan as may be necessary.

The Institute considers that the necessity for some larger authority is clear. Failure to review the Greater London Plan from time to time and to restate it in terms of changing conditions has in the Institute's view represented a serious failure in the field of regional planning since the War.

In default of setting up regional planning throughout the country, involving perhaps nine regional planning authorities, the Institute would prefer the Abercrombie region to the Royal Commission's area for the purpose of planning a solution to the problems of Greater London. In any case, the regional authority requires to be executive and not merely advisory. It should be conceived as a regional planning authority rather than a local planning authority as at present understood, some of whose detailed work it might not be suitable to undertake. The Institute would make no pronouncement on how it should be constituted—but there might be considerable latitude in its membership. The case for some such regional authority for town planning and traffic planning is strong, whether or not other local government functions and services (such as education) call for new regional organisation.

The Regional Authority

The type of regional authority envisaged by the Institute is the same as that which was envisaged by the London Planning Administration Committee, 1949 (the Clement Davies Committee), who postulated an authority possessing not only supervisory powers but also—under the Minister—such powers of direction and finance, if not indeed of execution, as might be necessary for regional purposes. That Committee set out in detail an admirable outline of the task necessitating concerted and therefore regional action. The Institute envisages that lower-tier authorities within the region should carry out many of the planning functions at present discharged by local planning authorities. But whatever form the local authorities within the region may take the Institute considers that those concerned with town planning and traffic should neither be too numerous nor too small.

This is the context in which the Town Planning Institute is thinking and our fundamental criticisms of the Royal Commission's Report is that it fails to deal adequately with the problems of regional planning.

Turning now to the proposals made by the Royal Commission, the Institute submits in the following paragraphs a number of comments based on a careful study of the Report.

The Commission propose apparently to create a local planning authority covering 850 square miles and having within it 52 multi-purpose boroughs. The Institute fears that this will not provide a practical planning organisation. The boroughs should be less numerous and endowed with greater resources. For example, the Commission's proposals divide up Central London into five boroughs—an arrangement which it is thought would be disastrous. The Commission's system of using existing borough boundaries to delimit all their boroughs would perpetuate many objectionable anomalies.

The Institute endorses whole-heartedly the proposal to create a first-class Intelligence Section. Its work would be indissolubly bound up with the other work of the authority's planning department and it is essential that such a Section should form part of it. And the Institute contends that if the Intelligence Section's studies were limited to the area which the Royal Commission proposed for the Greater London Council, it would cover only part of the picture and its value would be largely lost.

Highway Planning

The Commission accept that highway planning is an integral part of town and country planning—and clearly there would be great advantage in the proposed unification of responsibility for planning, construction and lighting of major roads and for traffic management over the whole area—but it is also proposed that the Minister of Transport should determine from time to time which roads should remain or become trunk roads. The implications of this are not pursued in the Report. Presumably the Minister would be the highway authority for such trunk roads, and this could lead to the position that the trunk roads (which are the most important roads, with vital implications for planning) would 'fall out of planning.' The Institute feels that it would be a fatal complication to have two highway planning authorities dealing with the major roads and that it is absolutely essential to have one planning authority, and one only, responsible for overall land use planning *and* overall highway planning, throughout the Region.

Thus the Institute endorses the Commission's proposed unification of land use and highway planning. In addition the Institute considers that the regional authority should maintain the closest possible contact with the providers of public transport and with the Metropolitan Police as traffic enforcement authority. Attention is also called once again to the importance of planning car parking, which has already been mentioned above.

The Commission's proposals show little understanding of the magnitude of the problems of comprehensive redevelopment and urban renewal, and there is a serious danger of the opportunities in this field being lost as a result of the proposed division of functions, whereby plan making

is to be performed by the Greater London Council and development control is left to the boroughs. A somewhat similar point arises in connection with redevelopment consequent upon the construction of new roads. It is not clear that the proposed division of functions will enable the most to be made of these opportunities, particularly if the road improvement is on a trunk road for which the Minister of Transport is the highway authority, thus introducing still another interest.

Housing Services

In the field of housing, the Commission find that this service is so closely connected with personal health and welfare that it must be essentially a borough service. Admittedly the Commission envisages the Greater London Council having considerable housing powers. But the Institute feels that there is a need for an actual regional housing service as well as, and complementary to, the borough services. Londoners are not tied to particular localities, and to make housing essentially a borough service would restrict movement. Two types of housing service are needed—regional and local.

In the matter of open space the Commission (paragraph 843) have no doubt that the Greater London boroughs would be fully capable of providing and running parks and open spaces, and though some of the larger parks and open spaces in Greater London may continue to lie within the area of more than one borough, for the most part these can be run jointly by boroughs. No concerted attempt is, however, being made at the present time to provide adequate recreational facilities for the Greater London region, and such action is unlikely to result from the Commission's proposals. In addition to Hampstead Heath and the Crystal Palace there are other open spaces which ought to be managed by the Regional Authority. In addition, the Institute questions whether boroughs in congested areas will be both able and willing to provide a suitable system of open spaces. Experience to date suggests that this will not be the case.

Conclusion

In conclusion the Institute wishes to make it clear that although it has been glad to offer these comments on a number of the more detailed considerations, its principal concern is the regional one expressed in the earlier part of this Memorandum and its fear that vital necessities for regional planning have by the Commission's proposals been largely overlooked. Unless there can be some single authority responsible for tackling the regional problem of Greater London as a whole and actively promoting its best development, no organisation of planning will be ultimately effective. Nevertheless, whatever decision the Government may come to, the Town Planning Institute will be only too anxious to place at the Government's disposal all assistance which it has within its power to give.

Developments in the Isle of Man

New £400,000 Terminal Building at Douglas Harbour

A NEW TERMINAL BUILDING is to be constructed at Douglas Harbour, Isle of Man, which when completed in early 1965 at a cost of £400,000, will provide full facilities, shelter and amenities for passengers using the port.

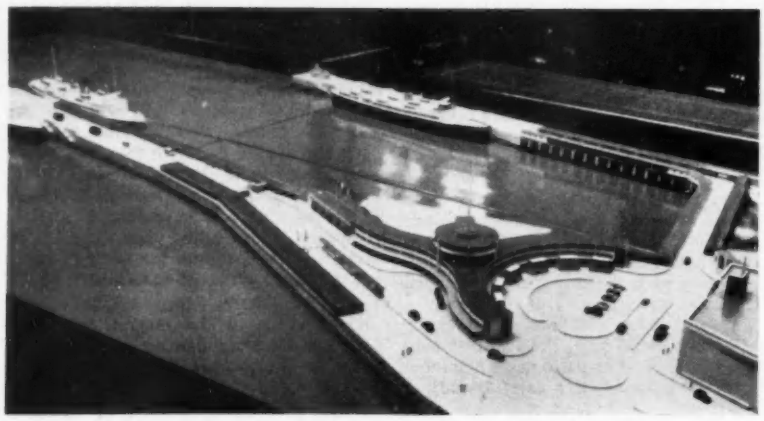
Of unusual design comprising in the main three curved arms, topped by a central circular building and 'skylon,' the terminal will be about equidistant between the two main piers and will serve both.

About 900,000 steamer passengers arrive at and depart from Douglas over a four-month period each year, and the terminal will meet all the requirements of the Port. The whole of the ground floor will be reserved for the travelling public with maximum cover and shelter, and containing all essential services such as left-luggage accommodation, toilets, kiosks for tobacco, sweets, newspapers and magazines, and a buffet and snack bar, together with information services and booking offices. The main Reception Hall will provide seating accommodation for about 2,500 people.

Passengers in transit will also have the use of the first floor where promenading areas will be provided on two of the 'arms' overlooking Douglas Bay and where arriving and departing steamers can be watched in comfort. The second storey will comprise a circular café, capable of seating about 150 people, the roof of which is to be surmounted by a slender 70 ft. 'skylon.'

The whole structure will be light in character and mainly of glass. It will be capable of dramatic illumination by night.

A model of the proposed new terminal building at Douglas Harbour, Isle of Man



The architects are Messrs Davidson, Marsh & Co., and Mr. T. H. Kennaugh, both of Douglas, IOM, and the consulting engineers, Messrs. E. W. H. Gifford & Partners, of Southampton.

Attracting New Residents

THE ISLE OF MAN TOURIST BOARD have been given permission by Tynwald Court (Manx Parliament) to proceed with the work of attracting new residents to the island.

After about six hours' debate the Court approved the establishment of a fund of £30,000 to enable the Board to build specimen houses in conjunction with the Local Government Board.

MR. J. M. CAIN, chairman of the Tourist Board, said the fund would be raised by borrowing to enable money to be advanced on loan to approved registered builders in accordance with a scheme to provide houses for new residents.

MR. T. H. COLEBOURN, chairman of a subcommittee appointed in connection with the proposal, said he had met representatives of the architects and the builders, and they were grateful for their co-operation. Houses now on sale in Douglas were not quite acceptable for permanent residents, he added.

MR. H. C. KERRUISH said the sub-committee had worked strenuously. No fewer than 1,400 applications had been received from people who wished to be permanent residents in the island.

MR. J. C. NIVISON supported the resolution with the omission of the words 'new residents.' He did so, he said, because he believed there was a shortage in the island of a particular type of residence, and speculative builders would be encouraged. His suggestion was accepted.

Replying to the debate, MR. CAIN said the Tourist Board had 97 offers of land to be used as building plots. They were treating the matter as an urgent one. It would mean work for Manx tradesmen and give the building trade on the island confidence in the Manx Government policy for the Island's future.

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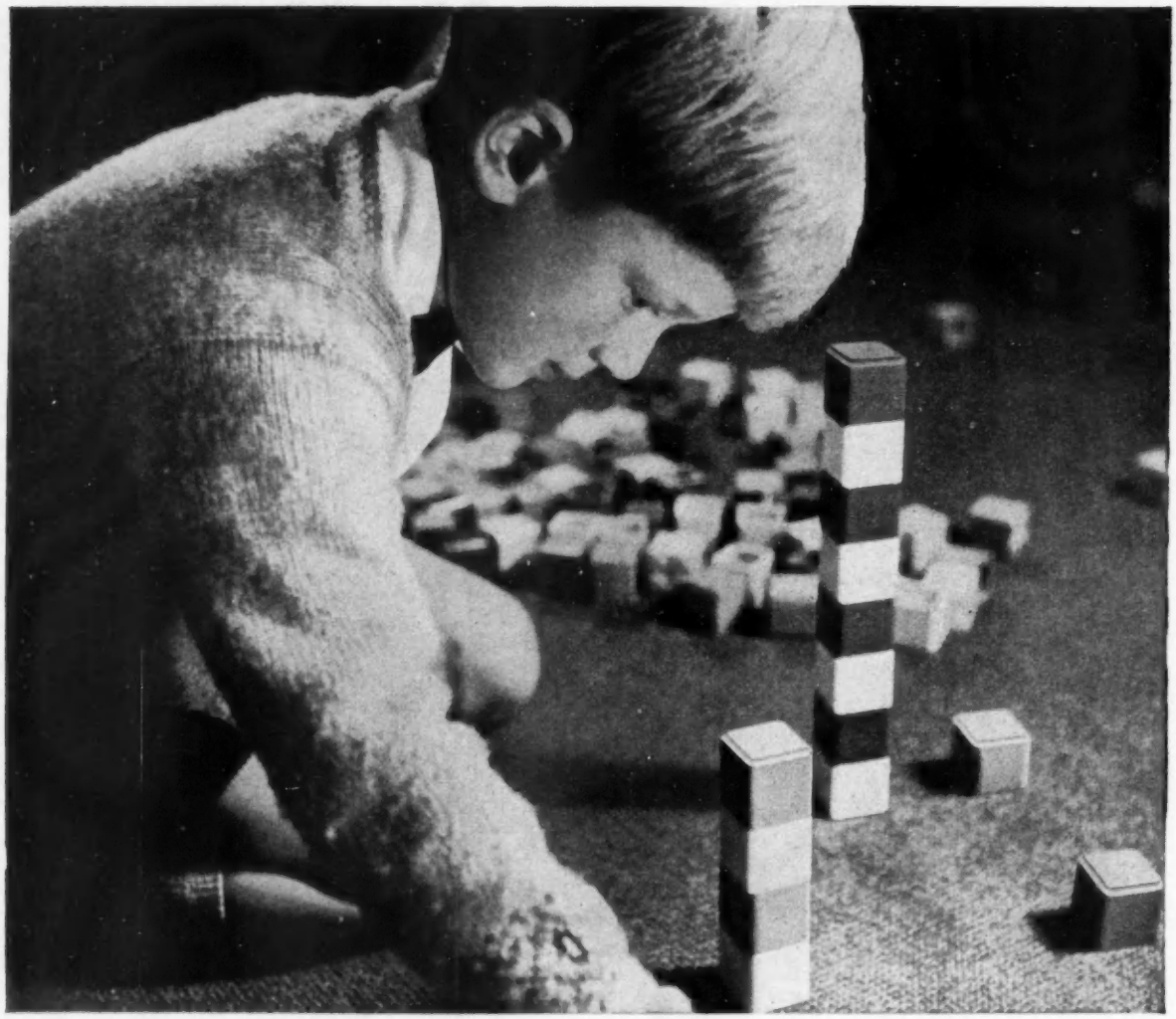

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'Anxiety About New Church Building'

Advisory Council Formed by Central Council for the Care of Churches

'THERE IS MUCH ANXIETY about new church building,' said THE DEAN OF GLOUCESTER (Very Rev. Seiriol J. A. Evans), chairman of the Central Council for the Care of Churches, at the opening session on April 11 of the ninth conference for members of Diocesan Advisory Committees for the Care of Churches, held at Downing College, Cambridge. In the course of his introductory remarks the Dean said:

'Few architects are expert in church building and fewer still have any liturgical knowledge. Vicars and church councils, who are the people who eventually give the order for a new church, are seldom able to give their architect the detailed instructions which he ought to have. An architect recently said that whereas, if a school was commissioned, he was given details to the last doorknob, when a church was ordered the most his clients could say was "we want a church like so-and-so."

Briefing the Architect

'The discontent about this serious development came to a head when in the Church Assembly the Bishop of Warrington (now of Blackburn) carried a motion that the Central Council should form a panel to prepare a brief for an architect who is to build a new church, a brief which could be put into the hands of the vicar and his council and which they could pass on. Now this is quite a task, for on the one hand the brief and its accompanying explanation must be sufficiently comprehensive to give the theological background and historical reasons for the plan of the Christian Church, and on the other hand it must be such as can be appreciated and understood by ordinary church people. The Council determined to throw its net as wide as possible and to go for the best brains that might be found, and a panel has now been formed and has started work.'

Members of the Panel

'The members of the panel are: The Dean of Gloucester (chairman); the Archdeacon of Leicester (Very Rev. I. D. Edwards); the Rev. A. H. Couratin, the Rev. Bernard Wigan (members of the Archbishops' Liturgical Commission); the Rev. P. Hammond (secretary of the New Churches Research Group); Mr. A. W. Savidge, Mr. B. H. Dowland (representatives of the Church Commissioners); Mr. J. S. Comper, FRIBA, Mr. S. E. Dykes-Bower, FRIBA, Dr. George Pace, FRIBA, Mr. Robert Maguire, ARIBA, and Mr. Keith Murray.'

The Dean added that the Central Council had tried to combine in the panel authorities of different traditions in church planning—the Liturgical Commission, the New Churches Research Group, the Church Commissioners' staff and the little group of eminent architects, all of whom embody learned but diverse outlooks on church building. So far, he said, the panel has settled down well, and they hoped for a valuable and practical result.

Experimental Church Architecture

In referring to a talk given on Wednesday, April 12, by Mr. Basil Minchin on 'The Christian Altar Through the Ages,' the Dean of Gloucester said:

'To any of you who are not familiar with the progress of the Liturgical Movement on the Continent and in England, this may prove to be an eye-opener. In the very midst of us, and perhaps without our knowing it, there has been growing up an attitude towards the Holy Eucharist, based upon a re-reading of theology and on history, which would need a re-arrangement of our churches if it were to be put into practice. But I must not speak as if this new appreciation of the Eucharist was still awaiting trial; it has already been tried and much new church building consists in experiments in this vein.

'I am sure our attitude to this movement should be one of understanding and sympathy. The Church of England needs a fresh and dynamic presentation of the Holy Eucharist, one in which all worshippers can join in the common action, and it may well be that churches of the future must be planned with a central altar which the faithful can approach from three sides. This, in turn, would change the traditional appearance of the parish church, with its long chancel and oblong nave and aisles, and might substitute churches which are round or octagonal.

'Churches of the new plan which I have referred to are, for the most part, to be found in new parishes in newly populated districts, where everything can be started anew; the problem of re-ordering an ancient church to fit this interpretation of the Eucharistic rite is more difficult.'

New Ideas Urged at Scottish Conference

THE NEED for a greater recognition of the corporate nature of worship in relation to church building was emphasised on April 6 at the conference on new church architecture organised in St. Andrews by the New Churches Research Group.

THE REV. PETER HAMMOND, director of the group, said a radical approach by architects was required. When setting out to design a church they should not start from architectural concepts, but from human activities. They should analyse the needs of the congregation and the fundamental purpose of the building.

In Britain, he thought, the whole approach to church architecture had been unrelated to human needs. It had been based primarily on pictorial conceptions in which the form of the building had no organic relation to the activity going on within it.

Grants for Historic Buildings in Scotland

Aiding Work of the National Trust

THE MINISTER OF WORKS, the Rt. Hon. Lord John Hope, MP, speaking at the annual meeting of the National Trust for Scotland at the City Chambers, Glasgow, on April 22, said that he and his predecessors had been able to make grants totalling more than £50,000 to the Trust on the recommendation of the Scottish Historic Buildings Council for the preservation of buildings of outstanding architectural and historic importance.

As an example of 'happy co-operation' between the Trust and the Ministry of Works the Minister mentioned the case of Culross.

The palace and the remains of the abbey were maintained by his Department, while the Trust was rehabilitating with vigour and enthusiasm many of the charming small houses of the Royal Burgh. Inverary was another small Royal Burgh where the Ministry, together with the Department of Health for Scotland, had been able to foster a bold scheme for preservation and here again the small local authority was giving all possible support to a large-scale scheme of restoration of an important example of 18th century town planning.

Lord John Hope paid a tribute to the 'little houses' scheme which had been sponsored by the National Trust for Scotland. Among these houses he referred particularly to Brodick Castle and Culzean Castle. 'I felt able,' said the Minister, 'to agree a substantial grant for the next four years towards the maintenance of Brodick and you recently made a request to the Historic Buildings Council for Scotland for a similar annual grant for Culzean. As you have said, Mr. chairman, in your annual report, Culzean has drawn on the general funds of the Trust to the extent of £25,000 since 1945 in spite of the £26,000 which it has received from special donations. I am very glad to be able to tell you that upon the recommendation of the Historic Buildings Council I am able to offer a grant of up to £3,000 a year for the next ten years in respect of Culzean Castle. The Historic Buildings Council have also recommended me to make a further grant towards repairs at Brodick Castle, which have turned out to be more costly than was originally estimated. I am happy to accept their recommendation that a further £3,500 should be offered to the Trust for this.'

In conclusion the Minister appealed for greater public support of the National Trust by way of the very inexpensive membership. The annual subscription is ten shillings per member.

The 'Microdistrict'

Town Planning in the USSR

FROM A CORRESPONDENT

IN AN ARTICLE in the Russian journal 'Nauka i Zhizn' ('Science and Life') two Soviet architects—A. Zhuravlyov and M. Fyodorov—set out to explain the meaning of 'microdistrict,' a word that nowadays crops up frequently in the USSR in connection with town planning.

'Microdistricts' are already playing a key role in urban construction. The architects point out that, merely by expanding the residential unit from an area of 7-10 acres to one of 50-75 acres, it becomes possible to undertake urban building on new lines, providing an opportunity to create large residential sections with many cultural and catering establishments, green open spaces and grounds for recreation and sports. A large grouping of this kind is called a 'microdistrict.'

The architects insist that it is not merely a grouping of blocks of flats, but an organic architectural entity in which individual buildings are located in accordance with the general laws of composition. They cite the example of a new 'microdistrict' now rising in the tractor works district of Chelyabinsk. A rectangular area of about 65 acres is bounded on all sides by city streets. Through traffic is excluded and side roads lead only to nearby shops and houses. The buildings themselves are arranged in such a manner that all the flats get an equal amount of sunlight. The shops, school, club, and sports grounds are situated in a green zone in the centre of the 'microdistrict' and residents can reach any of these establishments within a few minutes.

A 'microdistrict' of this type is planned for about 6,000 people, but may also be larger. A big residential section for 12,000 people is being erected near a large park in Noviye Kuzminki, in Moscow's south-eastern area.

The two architects state that for many people in the West, a private house with many rooms is their ideal dwelling, and the more rooms there are in the house and the more household functions can be conducted there, the more comfortable does such a house appear in the owner's eyes. Some people in the USSR also tend to think that the individual living premises of the future may be equally spacious, but they are much mistaken.

'No doubt in the future,' states the article, 'our living quarters will be extremely comfortable, since the development of techniques and the general high standard of living in our society will ensure every opportunity for this. But first of all the question arises as to whether there is any need for such a large number of rooms in a dwelling. After all, not many rooms are required for sleeping, leisure and various kinds of indoor occupations during one's free time. And is there any need to preserve in the future all the household functions which we now have? We do not think so.'

The article goes on to say that the problem of the new living conditions can only be solved by the consistent development of catering, educational and cultural services. Large catering establishments; model dining rooms and cafeterias with better food than can be provided at home; various kinds of shops, and universal agencies—all these will replace the domestic kitchen and obviate petty household chores. Boarding schools, kindergartens and crêches will make life easier in many ways. Thus there will be no need for kitchen premises, storage rooms, servants' quarters, etc. With services organised on the new basis, it is stated, women will be freed from unproductive drudgery and the conditions in which the younger generation are brought up will also be greatly improved.

Communal Living

The construction of new club premises, gymnasiums, swimming pools, libraries and rooms for music and the other arts, where people will be able to satisfy varied tastes and interests, will eliminate the need for personal libraries and other premises for individual work at home. In this way new and better forms of public amenity will eliminate the need for flats with a large number of rooms.

New types of living quarters are being developed along the lines of uniting establishments for public purposes with residential premises. This trend was reflected in many architectural projects presented at the USSR Exhibition of Town Building in the spring of last year.

In plans presented by the Special Architectural Designing Office in Moscow, the problem is solved in this manner:

A group of blocks of flats is linked by a gallery in which different premises and enterprises providing communal services are situated. The people living in the flats can go to the dining room, the recreation room, the service agency, etc., along warm passageways. A group of Kiev architects have suggested that several types of buildings combining both residential quarters and communal premises under a single roof should be established in new 'microdistricts.'

An interesting proposal concerning the future development of towns was recently submitted by G. Gradov, corresponding member of the USSR Academy of Construction and Architecture. He put forward a plan for a new type of residential area in which the 'public sector' considerably exceeded the present standards. According to this plan, most of the children will be brought up in kindergartens, crêches and boarding schools located near their homes. Instead of full-size kitchens, the flats will have small kitchenettes. It is expected that the public dining rooms will provide such excellent meals and variety that the idea of home-cooking will not appeal to anyone.

This plan, in the opinion of Zhuravlyov and Fyodorov, shows that the transfer of some of the household functions from the flat to communal premises will make it possible to solve the new problems without increasing building costs.

Box-Frame Construction

Economic Swedish Method

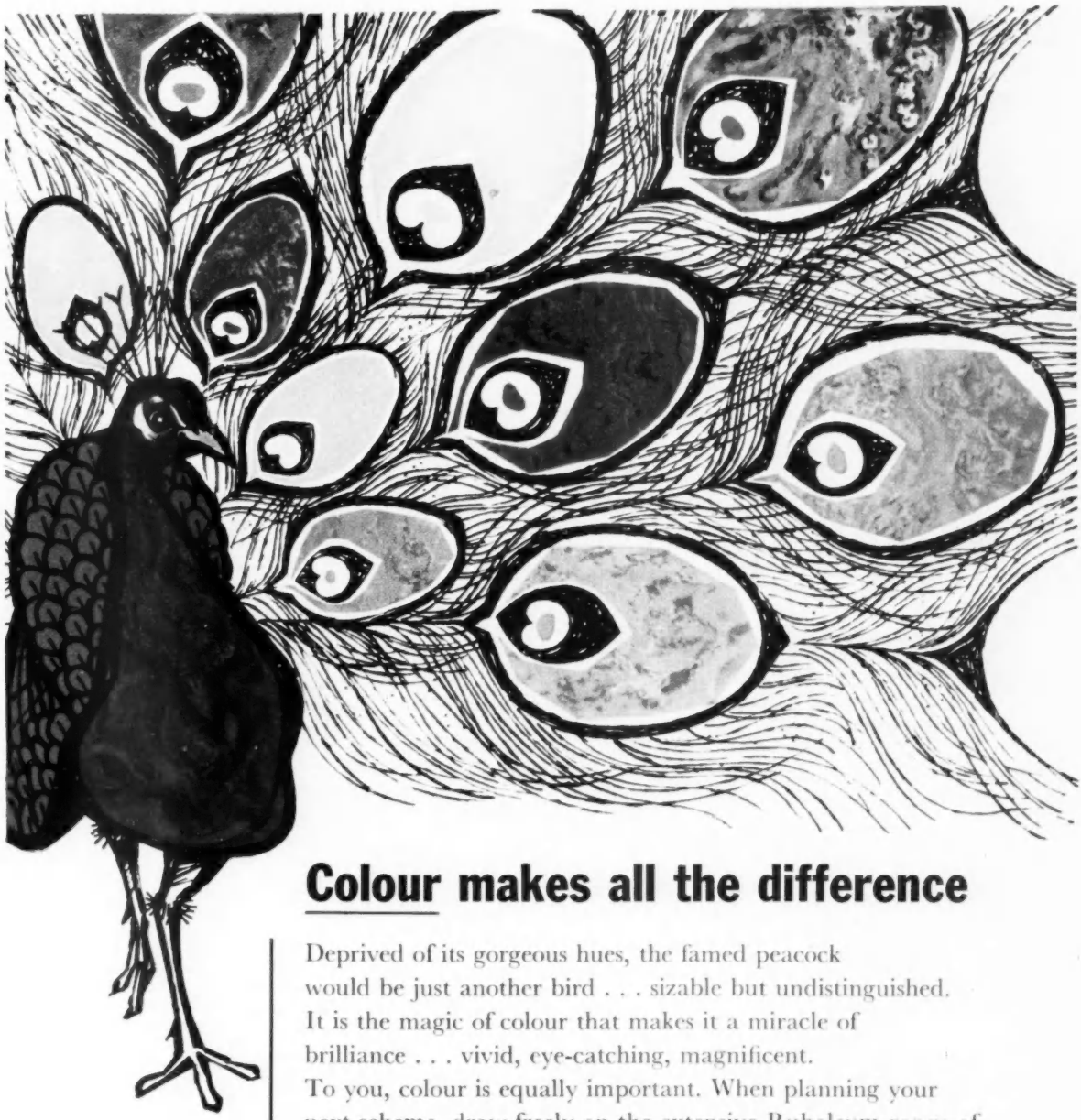
THE ALLBETONG (ALL-CONCRETE) box-frame construction method developed by AB Skånska Cementgjuteriet, Swedish contractors, at the beginning of the 1950s in order to reduce building costs and labour is being increasingly adopted in Sweden, the company reports in a recent survey. One of the latest projects to which the method is applied is a residential area in Malmö, South Sweden, with 720 apartments in five buildings of 5 to 25 storeys, including shops, offices, indoor tennis courts and garage for 1,400 cars.

Basically, the method entails pouring a monolithic box-frame structure of concrete. Standardised forms of room-size for the casting of floors and internal cross walls are assembled on the ground and hoisted by cranes on to the structure. Supported on a steel frame and fitted with all necessary bolts, clamps and jacks as well as a platform from which the concrete can be poured, the formwork can easily be withdrawn after the casting and used again. The cranes generally used have a lifting capacity of 2-2½ tons and a reach of 60 to 100 ft. A notable feature of the Allbetong method is that the finishing work proceeds with the main construction. Each floor slab is screeded, finished and polished by machine before the next lift of walls is poured. The forms, both for walls and floors, are faced with plastics-coated plywood, leaving a surface which can be painted or wallpapered after a simple polishing operation.

Unless a traditional heating system with radiators is preferred, heating coils are built into the floor slab during construction, together with the plumbing and utility lines. Electric conduits are likewise cast in the walls, kitchen cabinets, closets and other interior fittings are fixed by being bolted to threaded sleeves cast in the concrete. Non-structural wall elements, prefabricated garbage shutes, ducts and stairways are also dropped in place by the cranes before the forms are put in place for casting the next storey.

The exterior walling usually consists of precast concrete panels, including an outer slab of concrete, 8 cm. thick, followed by a 10 cm. layer of rockwool insulation placed between wooden studs. On the inside is plasterboard backed by aluminium foil. Various finishes have been employed for the wall panels.

The net result of the various labour-saving measures applied is that the number of man-hours required for a given volume of building has been reduced by about half when using the Allbetong method, compared with advanced normal construction, the company claims.



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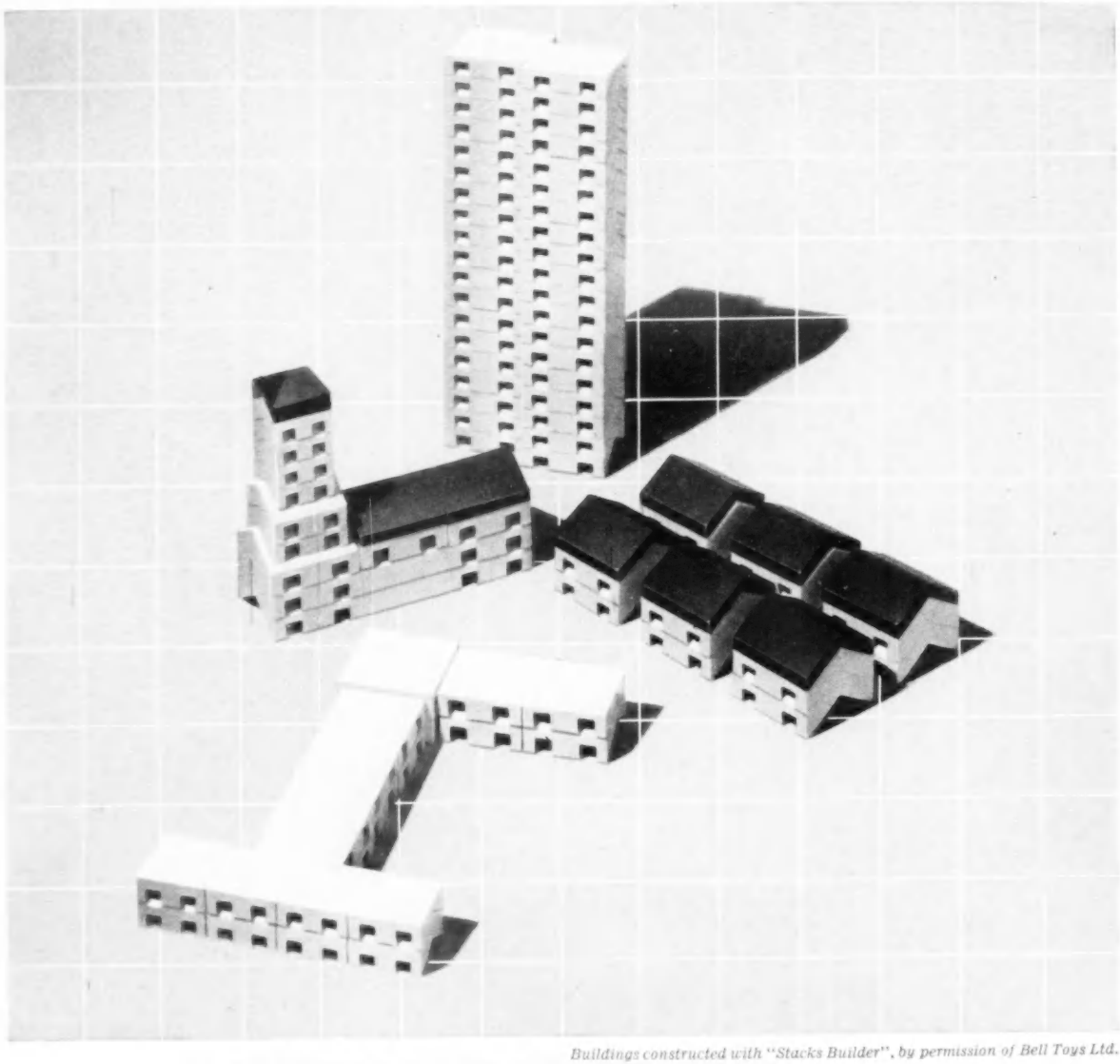

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Fire Precautions in Buildings

Address to London Accident Prevention Group

A TALK on 'The Factories Act, 1959: Provisions Relating to Fire Precautions' was given recently by MR. R. E. S. WHILLOCK, AMIFIREE, Assistant Divisional Officer, London Fire Brigade, at a meeting of the London Building and Engineering Contractors' Accident Prevention Group.

Mr. Whillock said that the country could not continue to afford its heavy direct annual fire loss, which in 1960 amounted to £43m. This figure did not reflect the consequential losses caused to production, and possible loss of employment, nor did it take into consideration loss of life or injury.

The Factories Act of 1959, which amends and extends the provisions of the Factories Acts of 1937 and 1948, fulfilled a long delayed need and gave the fire brigades for the first time the opportunity to take part in the improvement of fire protection arrangements in factories other than by way of advice on requests from factory occupiers and owners.

The speaker gave the following brief summary of the relative sections of the 1959 Act dealing with fire prevention and precautions:

Sec. 9 (Means of Escape).—Transfers from district councils to the fire authorities the duty of examining and certifying means of escape, except in London where the provisions of the 1937 Act are still applicable.

Sec. 10 (Means of Escape).—Procedural and miscellaneous provisions regarding the examination and certification of means of escape.

Sec. 11 (Fire Prevention).—Empowers the Minister of Labour to make regulations in respect of the internal fire precautions in factories and will probably cover such items as general cleanliness (i.e., housekeeping), internal structure, use of special plant, processes and equipment, and also the storage and use of inflammable liquids and substances.

Sec. 12 (Fire-fighting).—Refers to the compulsory provision of fire appliances in factories, their maintenance and use, and for the calling of the fire brigade in case of fire.

Sec. 13 (Safety provisions in case of fire).—This is a very important section as a fire warning system is now compulsory in every factory, the means of escape from which are required to be certified under Sec. 34 of the 1937 Act.

Sec. 14.—Gives the Minister power to designate the arrangements necessary in connection with the fire warning system, i.e., instruction to employees on procedure in case of fire, and their familiarity with the means of escape from the building.

Sec. 16 (Testing of fire-warning systems).—Fire brigades recommend the daily testing of a fire alarm system, which, if carried out at a predetermined time and for just sufficiently long enough to ensure that the system is working, should not cause any confusion.

Sec. 17 (Powers of entry).—HMIF can authorise fire brigade officers to enter and inspect for the purpose of reporting to the factory inspector any matters falling within the inspector's duties relating to fire.

The speaker then referred to the formidable task confronting the London Fire Brigade by virtue of the many thousands of factories which will have to be surveyed. He said that there were some frightening problems as quite a number of factories were housed in totally unsuitable buildings, many of which were nothing more than converted dwelling houses. He went on to give examples of fires in these places and emphasised that smoke, heat and fumes were often far more dangerous to the occupants than the fire itself. He said that no charge was ever made in cases of fire or humanitarian services and the fire brigade should be called immediately to any fire, however small.

Importance of Fire Drills

Regular fire drills were very necessary, one of the important points being to familiarise employees with alternative means of escape. Fire could happen to anybody.

A member asked whether members of the staff of firms should not be instructed in the isolation of fires. MR. WHILLOCK said that in most big buildings there were isolating doors and these, even if automatically operated in case of fire, should be closed when the building was empty. The person in charge of the building, or where there was a floor or departmental fire officer, should see that the fire-fighting equipment was in order and always readily available. He should also see to the closing of doors in the event of fire.

On the question of joinery shops, good housekeeping was of prime importance. Smoking was a problem which was difficult to control even where inflammable material was involved. The construction of the building should be of the standard required by the by-laws. Open electric fires and oil stoves were undesirable, and fire extinguishers should be available.

In relation to fire precautions in high buildings under construction, Mr. Whillock said it was desirable to install dry or internal wet rising mains as the building rises. Unfortunately, control could only be exercised directly over buildings of excess cube or height, but contractors, if in doubt and in their own interests, should consult the fire brigade about suitable precautions.

European Timber Markets

Record Imports of Sawn Softwoods

SAWN SOFTWOOD imports by European countries during the year 1960 should establish a new record for the post-war period. Consumption has reached high levels, wholesale merchants and retailers are rebuilding their stocks, and requirements have generally been met at prices which, though having risen from the low points reached in 1958/59 still remain below the highest levels attained in 1957. These are some of the conclusions to be found in the latest 'Timber Bulletin for Europe'* published jointly by the Secretariats of the United Nations Economic Commission for Europe (ECE) and the Food and Agriculture Organisation (FAO).

The demand for sawnwood remained generally strong into the third quarter, stimulated by high levels of all-round economic activity. Importers have rebuilt stocks while meeting increasing requirements, and producers of sawnwood have responded with great flexibility to the importers' demands. As the year progressed these additional requirements moved prices of sawn goods upwards; in consequence there were corresponding increases in the prices paid at the autumn log and stumpage sales. Nonetheless, continues the Bulletin, there appears to be a gradual slowing down in the rate of growth in the housing sector, and somewhat of a waiting attitude has been adopted by importers.

Notwithstanding some uncertainty of outlook, buyers at the autumn 1960 stumpage sales in Sweden purchased more raw material at somewhat higher prices than at the corresponding period of 1959. In Finland, too, greater amounts were offered and taken up than the previous year; about 20 million cu. m. in all, at average prices about 12 per cent higher than in 1959. In France, substantial increases in the prices for coniferous and hardwood were also recorded at the autumn stumpage sales, and in Western Germany, prices for roundwood recovered after a short-lived setback.

In the northern European countries output of sawn softwood during the first three quarters of 1960 was at or near full capacity, in line with the general trend of economic expansion.

The rise in imports of sawn softwood continued into the third quarter of 1960 and 9-month totals of European imports are 10 per cent higher than last year's. The United Kingdom reports receiving 1,305,000 stds. for the first nine months, which was 265,000 stds. more than imports by the same time in 1959. On the Continent, with the exception of France, sawn softwood importing countries received increased amounts.

The ECE Bulletin concludes that while the economic outlook in Europe is reasonably encouraging and high levels of industrial production and construction should continue, current growth rates do not appear likely to be sustained. Consequently, the 1961 forecasts, made by the ECE's Timber Committee in October, 1960, envisioning a slight falling-off in the sawn softwood trade for the forthcoming year, do not seem to require change.

*'Timber Bulletin for Europe,' Volume XIII, No. 3, 78 pages; Geneva, bilingual edition in English and French. Available in the United Kingdom through HM Stationery Office, PO Box 569, London, SE1, price 7s.

TECHNICAL REVIEW

This Review of plant, equipment and materials—in most cases new or with new features—is intended to give brief details only of the products mentioned. Notices are based on data supplied by the manufacturers. Additional information and prices can be obtained either direct or by using the prepaid Readers' Service form which appears on page 166 of this issue. The form can be used for more than one inquiry.

1. Building Blocks

A new lightweight concrete CAVITY WALL BLOCK, measuring 18 in. x 9 in. x 10 in., is designed for full load bearing applications. Its cross section consists of two 4 in. cavity blocks which are separated by a 2 in. cavity. A corner block is provided, laid either face up to give bonding in courses. Known as the 'Caviblock,' a square yard of wall can be made up with only eight blocks which would bring savings in time, labour costs, mortar and wall ties. The thermal insulation is excellent and the key is ideal for plaster and exterior renderings.

Hemel Hempstead Lightweight Concrete Ltd.,
Redbourn-rd., Hemel Hempstead, Herts.

2. Ceilings

A new ACOUSTIC TILE has a directional surface pattern to give greater scope in the design of different ceiling effects. Good sound absorption and incombustibility are additional features of these tiles which are made from mineral fibre. They are available in a size of 12 in x 12 in. x ¾ in. with kerfed and back-cut edges which allow installation by either adhesives or metal suspension systems.

Armstrong Cork Co., Ltd.,
Carlisle-rd., Colindale, London, NW9.

3. Paints

In America a single coat of PAINT based on Pliolite S-5, a synthetic rubber resin, has been used successfully on a huge quarter mile long, 120 ft. high concrete grain elevator. No prior preparation of the concrete surface was necessary as the paint itself is a curative. The paint was applied with 9 inch deep pile rollers. With seven men working, 30 days were required to complete the job.

6,000 gallons of masonry paint were used on this grain elevator in Kansas

Developed especially for use on grain elevators by Kwal Paints Inc., of Denver, Colorado (USA) after nearly eight years of research and field testing, the rubber based paint effectively seals out moisture. At the same time it forms a breathable film that allows unwanted dampness from within to escape without peeling the paint. The rubber resin also provides excellent resistance to alkalis and to chalky surfaces. The paint is now available in this country.

Hubron Sales Ltd.,
Failsworth, Manchester.

4. Plaster

A LIGHTWEIGHT PLASTER which is simple to specify, easy to use or store and is suitable for all plastering backgrounds, has just been introduced to the north of England market. Based on a special grade of vermiculite, the plaster is supplied in two simple but comprehensive forms—a backing coat, for direct use on all backgrounds including concrete, plasterboard, and painted brickwork, and a finishing coat which can be applied not only to the backing coat but also directly to plaster-board for single-coat work. Because it is less bulky when dry than other lightweight plasters, it can be packed in smaller bags which means a saving in storage space and easier handling.

Imperial Chemical Industries Ltd.,
Millbank, London, SW1.

5. Pumps

A new HIGH CAPACITY PUMP, constructed in a special lightweight aluminium alloy, weighing only 55 lb. and easily transportable, is announced. This compact pump is ideal for use in confined and difficult places. The pump has a capacity of 130 g.p.m. against a head of 15 ft. In the event of excessive heat, due to any cause, the pump motor is automatically switched off until it returns to its normal temperature. This feature reduces maintenance costs and obviates the need for external protection.

A.C.E. Machinery Ltd.,
Porden-rd., London, SW2.

6. Roofing

A new glue-laminated TRUSS, designed to simplify all types of pitched roofs for housing, has recently been developed. The truss, which can take the place of the two or more orthodox trusses per house, shows savings in both capital and labour costs.

Basically the new product is a 'super-truss,' prefabricated, all-glued and factory-made from finished timber under closely controlled conditions. It is delivered in two main sections to the site, where it is quickly hoisted, without special lifting gear, and assembled in position.

The assembly, which entails only the bolting of the bottom tie-bar and the nailing of a collar, takes but a few minutes. Main construction is of 4 in. x 1½ in. planed timber. All joints are glued and nailed; a weather-resisting resorcinal formaldehyde adhesive is used throughout. A feature of the truss is the laminated T-section rafter member, which gives extra strength in all directions.

Dexion Ltd.,
67 Maygrove-road, London, NW6.

7. Staging

A CANTILEVER PLATFORM with a safe load carrying capacity of 200 lb. has recently been added to a range of staging products. Its use enables easy access to be gained to maintenance points situated over obstructions such as shop counters and machine tools. The platform is of heat treated aluminium alloy construction which, together with snap-action hooks, enables assemblies to be carried out from easily portable units in three minutes. Special brake-type castors are fitted on the front legs so that the staging may be immobilised when required.

Martin Thomas Ltd.,
Southall, Middlesex.

8. Ventilation

A range of VENTILATOR UNITS are now being produced for ridge or roof slope mounting. They are available in four basic sizes with fan output capacities ranging from 1,900 c.f.m. to 9,100 c.f.m. to suit most industrial requirements. Robustly constructed of galvanised sheet metal, the units are so designed that no site drilling of existing structural roof members is required for fixing purposes. They can be quickly secured by simple clamping bolts so that installation by maintenance staff, to the detailed instructions provided, should not be difficult.

The totally enclosed motors with special four pad mountings are secured on rubber bushes to eliminate vibration transmission and the bearings are of the oil impregnated type to minimise maintenance. When, however, inspection is required, the provision of hinged hoods to the units enables this to be carried out externally from the roof slope.

W. G. Cannon & Sons, Ltd.,
38a St. George's Drive, London, SW1.

9. Engines

Common failures of the two-stroke engine, particularly in starting, can, it is thought, be overcome by the use of an IGNITION SYSTEM that has just been evolved. Known as the 'Magister' system, it varies from the conventional method of magneto ignition by the replacement of the existing HT ignition coil by a feed coil. AC current, induced from this in the same manner as usual systems, is then converted to DC through a small rectifier which, in turn, charges a condenser. The charge is retained by the condenser until the contact breaker closes. At this point the store current is discharged through the ignition coil, which again uses primary and secondary windings,

Principal components of the new ignition system including the leads from the feed coil and contact breaker to the 'Magister' unit

producing a high voltage which is taken to the sparking plug by HT lead.

Producing the spark during the closing of the contact breaker shows distinct advantages. When the spark is produced at the time of opening the arc formed by the current is extended over a period. When the contacts are closed at the time of spark, the condenser discharge rate is of a much higher order, with a reduction of arcing resulting in an appreciable increase in point life.

With the conventional magneto, the breaking of the contact points to the magnetic break is of utmost importance. With the 'Magister' discharge system, however, this timing is not so critical, and any discrepancies at this point have little or no effect on the ignition output. This is due to the fact that the condenser holds its charge from the feed coil till the contact breaker closes. While a recommended contact clearance is given, variations from this do not affect the magneto output.

Wipac Group Sales Ltd., London-rd., Buckingham.

10. Technical Publications

(a) A comprehensive reference book has been prepared by John Williams of Cardiff Ltd., to assist architects with all problems connected with metal window installations, and to help in detailing on the drawing board. The book conforms to A4 International size (11¾ in. x 8¼ in.) and the sections illustrated are all to scale. No more searching through shelves of catalogues for, say, a centre hung ventilator and then back through them again for the double glazed section sizes!

The volume is divided into 23 sections dealing with fabrication, specification and fixing, and covering industrial, commercial, housing and other special categories of application. All aspects of fenestration and glazing are dealt with, including doors, lantern lights and window furniture. The section on curtain walling methods is particularly well done, providing some dozen and a half pages of various construction systems, with interesting spandrel panel treatments. An excellent feature of the method of presentation is that the examples are accompanied by illustrations of particular buildings in which they were used, so that the architectural, aesthetic characteristics of any given unit or system are immediately apparent. Published by John Williams of Cardiff Ltd., East Moors-road, Cardiff (publication H125, price 2 gns.).

(b) Copies are now available of the latest issue of the 'Architectural Metalwork Catalogue,' published by The Morris Singer Co. Ltd., Ferry-lane works, Forest-road, Walthamstow, E17. Illustrations of Sir Jacob Epstein's group of five figures called 'Social Consciousness," together with a selection of other famous statues, are featured, along with a varied selection of the company's contracts. This well-designed catalogue should be of interest to both the expert and layman. Copies can be obtained from the company.

(c) Thermoplastic materials, and applications to which these materials are put, are dealt with in a booklet recently published by BX Plastics Ltd. Entitled 'Developments in Plastics,' it gives a fairly detailed report of the company's history and the development, over the years, of the production and distribution of thermoplastic materials. This delightfully-coloured publication is obtainable from the Publicity Department at Higham Station-avenue, London, E4, free of charge.

(d) A catalogue has been issued by Mander Brothers Ltd., varnish and paint manufacturers of St. John's-st., Wolverhampton, introducing a completely revised colour range, co-ordinated with six of the company's major finishes. The range includes the full BS 2660 series series selected supplementary colours. The catalogue is intended for the use of architects, local authorities and the larger building contractors. Copies can be obtained from the company.

(e) Mellowes & Co. Ltd., of Bridge-street, Sheffield, 3, have issued a booklet dealing with their 'Mellwell' partition, ceiling, and wall lining products. The panelling can be carried out in a variety of materials although for general work a tough high-density board is provided. This can be stove-enamelled to any colour and is in itself an insulating medium. Voids between the panels will accommodate electrical, telephone and other services.

Trade News

NAMMC New Members

THE NATURAL ASPHALTE MINE-OWNERS AND MANUFACTURERS COUNCIL has enrolled into membership Messrs. Engert & Rolfe Ltd. and Messrs. F. J. Prater Asphalte Co. Ltd.

New Member Company

OWEN-KLEINE STRUCTURES LTD., a new member of the Owen Organisation, has been formed by Rubery, Owen & Co. Ltd. (Structural Division), and Kleine Reinforced Concrete Ltd. (formerly The Kleine Co. Ltd.), specialists respectively in the fields of structural steelwork and reinforced concrete.

The resources of the two companies have been combined to develop a system of Lift Slab Construction applicable to multi-storey buildings.

New County Stockist

THE BARTREV BOARD CO. LTD. announce the appointment, as from April 21, of Nixon Knowles & Co. Ltd., of Queen-road, Nottingham, as main distributors for the counties of Nottinghamshire and Derbyshire.

A TWO BEDROOM TIMBER BUNGALOW *is to be used as a travelling exhibition for a display of the Coal Utilisation Council's approved appliances and central heating. Built by Swiftplan Ltd., a company in the Taylor Woodrow Group, and designed in collaboration with the British Columbia Lumber Manufacturers' Association, the bungalow uses Canadian wood throughout. It is constructed in four sections, into one of which are concentrated the plumbing services, including the bathroom, cooker, sink, toilet, the fireplace and central heating boiler (serving five radiators for the purpose of the CUC).*

The exhibition opens in Peterborough May 5-13 and other towns to be visited are Derby, Wellingborough, Northampton, Scunthorpe, Mansfield, Grimsby and Nottingham, finishing in Kettering November 22-December 10.

Farm Buildings

Views Expressed at the Farm Buildings Conference at Norwich

Among the considerations discussed at the Farm Buildings Conference, held at Norwich on March 24 under the auspices of the Ministry of Agriculture, Fisheries and Food, were the importance of their design and construction by experts, the necessity for well-thought out landscaping, choice of materials for their flexibility and character, prefabricated components and buildings, and the desirability of closer liaison with materials manufacturers. Extracts from three of the papers submitted to the conference are given below.

An Architect's View

Paper by B. M. Feilden, ARIBA

GREAT CHANGES are taking place in farming and these are affecting the types of building required. It is only recently that real progress has begun to be made with the functional design of farm buildings, and developments are constantly under way. Changes in farming technique are bound to affect the design of farm buildings, and as farming in the west country differs from that in Norfolk, it is only logical to expect different types of buildings to evolve. Technical developments and the design of buildings do in fact support one another. There is the problem of providing these new buildings at the right cost, and a lot of research is needed to establish the correct way of doing things and to provide the right ventilation and heating for farm stock. The farm buildings adviser's job is to relate the latest in farming research to the latest in building technique.

Building costs are always considered too high but in fact farm buildings are being provided at between 8s. and 14s. 6d. per sq. ft. of covered area and this is absolutely rock bottom, and leaves little scope for choice in material or method of construction. The general solution is the use of portal frames in steel or concrete or timber trusses, with a lightweight cladding and blocks or bricks up to a height of about 5 ft., with an asbestos cement roof. Building economics therefore lead one to consider larger spans than hitherto.

Cladding Problems

To deal with the problem of cladding, asbestos cement is generally used and may at first sight appear cheap and suitable. However, if it comes too close to the ground it often gets broken, especially at the corner of the building. Repair can be difficult with the possibility of breaking another sheet, especially since the sheeting can get very brittle with age. Compare the advantages and disadvantages of a wall clad with asbestos cement and one clad in rough 7 in. by 1 in. deal boarding pressure impregnated with creosote. The wall is 100 ft. long and 18 ft. high, and has a plinth of brickwork up to 5 ft. The wall clad in timber, though initially more expensive, has a greater degree of flexibility and a higher salvage value. It is this desire for flexibility that has prompted the use of framed buildings and this in turn has opened the way to the provision of standardised prefabricated buildings.

Farmers are suspicious of architects (the experience being based on the older generation who were not functionally minded) but sometimes do use their services. There is a strong 'do it yourself' desire which I appreciate. One can see the economic advantages of the self-reliant attitude, and indeed I support the idea that every farmer should also have a concrete mixer. The farmer often sees that he can save the 33⅓ per cent grant and a bit more by using odd bits of material that are lying about on the farm, but the result is a sort of shanty town over which the planning authority has no control. Often they are bad buildings put up in the wrong place, just slapped up and then allowed to decay. The policy of 'cheap at any price' can be very expensive.

There is a need, however, for well designed small buildings as adjuncts to the larger buildings for which the farmer will almost certainly employ a building contractor and possibly an architect or land agent. One definition of an architect is that he is a chap who draws out your mistakes before you build them—but at least this does give you a chance to correct your mistakes! Your building should be like a piece of machinery designed to do the job, and sited in relation to the rest of the farm buildings. This siting is a skilled job and one of the reasons why so many of the new buildings look wrong is that they are badly sited in relation to other buildings and the landscape. The problem is to fit these new buildings into the Norfolk landscape, and try to do it as well as the old mellow brick and pantile or thatch buildings. Bringing new building into the countryside presents special problems, both in view of their size and the use of modern synthetic materials such as asbestos cement.

The size of new farm buildings makes consideration of levels most important. Correct siting is the biggest problem of all, and this comes from detailed consideration of the layout and work planning; there is often reluctance to take enough space for the correct layout. Lessons can be learnt from the old buildings. Walls were in differing and often contrasting material from the roofs. Roof lines were often broken or varied, and eaves were well defined.

From the point of view of fitting into the landscape I do find that new asbestos cement side walls are altogether too glaring, but one can accept it as a roofing material if there is a wall of contrasting colour and texture. Lastly, let us not forget that however hideous a building, if trees are planted around it nobody will see it when the trees mature. Ugliness, which many of us object to, if traced back to its origins is due to clumsy thinking and 'ad hoc' decisions. It can be avoided by planning design and detailing.

Exercise in Collaboration

In a group discussion session delegates were asked by the EARL OF LEICESTER to suggest a scheme for a new covered bullock yard to replace existing yards near the 18th-century Great Barn on the Holkham Estate in Norfolk. Their task was to design a technically up-to-date covered yard in keeping with the appearance of the brick and slate construction of the Great Barn.

Yorkshire boarding was one of the most favoured materials proposed, with coloured asbestos and impregnated timber as possible alternatives. Bricks in sympathy with those of the existing building were also a popular choice. MR. J. NOEL WHITE, MA, deputy director of the Council of Industrial Design later expressed the hope that the exercise would be an example to manufacturers of mass-produced products, an example which was badly needed.

The Design of Farm Buildings

Paper by J. Noël White, MA

DURING THE TWENTIETH CENTURY mechanisation has changed the face of our countryside, particularly the downlands and the hedgerows. In my view the change has improved productivity and the environment. With this on the credit side it is natural that those who care for—and subsidise—our rural areas should express their anxiety concerning the great expansion of agricultural building which is rightly being promoted by the Ministry of Agriculture. Where standards exist it is even more important to maintain them.

Farm buildings are of increasing importance to the prosperity of agriculture, and the rapid rate of building which is developing is a threat to the landscape unless the buildings are well designed. The Ministry of Agriculture has set aside £50m. over the next decade or so to meet one-third of the cost of such capital development. What should be done about these buildings? In the long run I believe that there will be a radical rethinking of the design of farm buildings which will bring them more into line with the latest results of the method study of farming operations. By skilful application of this knowledge and inspired design the components will become more versatile, structurally stronger and better architecturally.

Meanwhile it is important to improve the standard product so that by design better protection is given to fragile materials, the detailing of existing components achieves some architectural form,

HY-RIB

for suspended ceilings

10,000 square yards of Hy-Rib Lathing was used for the suspended ceilings in the seventeen-storey office building Gardiner's Corner Development at Marylebone.

HY-RIB DIVISION

Truscon Limited, 35/41 Lower Marsh,
London S.E.1. Telephone WAT 6922

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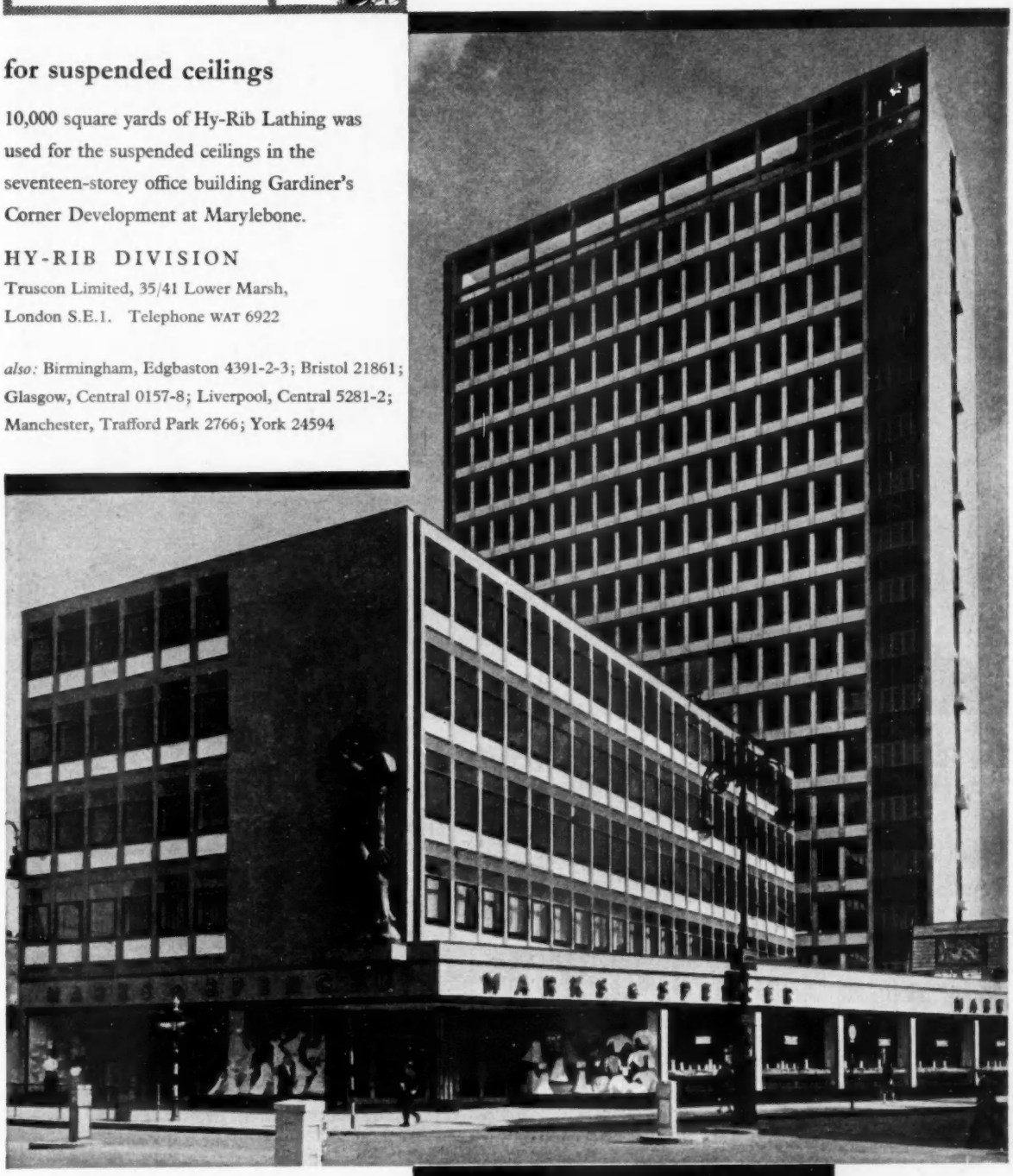
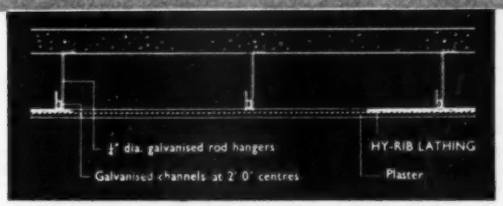
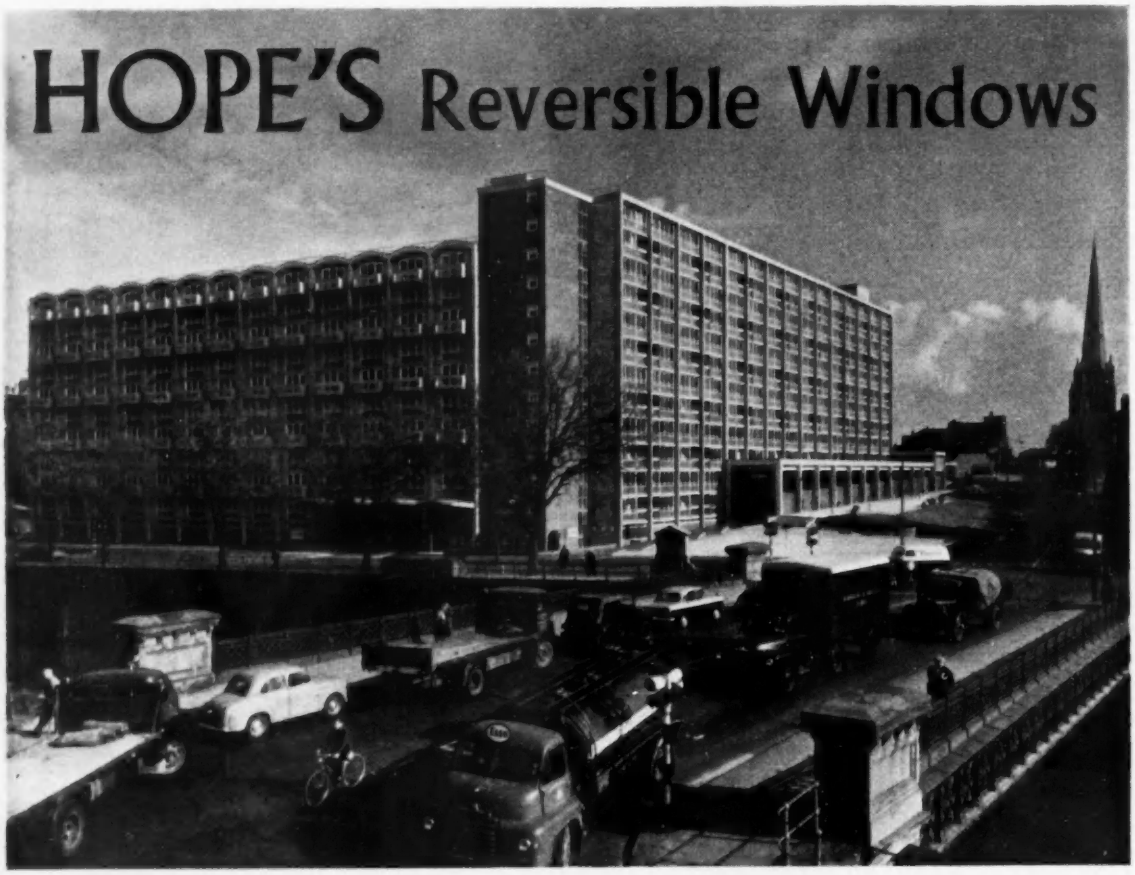


Hy-Rib Lathing with three coats of plaster gives an unbroken surface, accurate alignment and high fire-resistance.



ARCHITECTS:
R. Siefert
& Partners

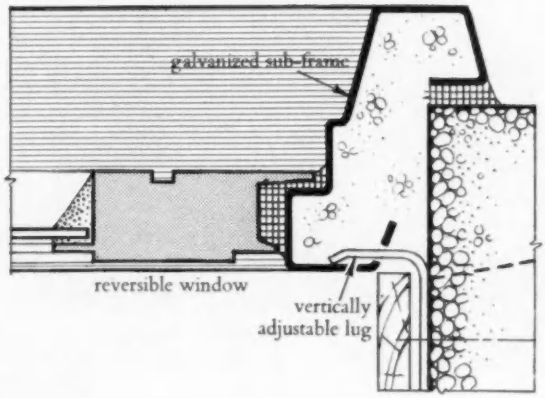
HOPE'S Reversible Windows



WARING HOUSE, REDCLIFF REDEVELOPMENT AREA, BRISTOL

Albert H. Clarke, F.R.I.B.A., Bristol City Architect John Laing & Son Ltd., Building & Civil Engineering Contractors

1348 Reversible Windows are here ranged in groups of 2 and 3 in galvanized steel sub-frames which start at floor level and contain Georgian wired glass spandrel panels. The detail alongside shows how the sub-frame completely frames and weathers the concrete opening and at the same time absorbs any variation in opening sizes. The casements turn completely through 180° to permit easy cleaning and repainting from inside the flats.



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HENRY HOPE & SONS LTD.
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and the total effect of this compromise is less strident in the landscape. A patch rather than a hole.

The materials—concrete, steel, timber, asbestos—used in these buildings are not disreputable. Designed well they can produce buildings of distinction—each has its own properties which can be exploited in a modern way for a modern function. No-one in his senses would want to build 14th century tithe barns in the 20th century. New materials must be handled with great skill because they are machine made and mass produced and they must fit into a mechanised agriculture. In the old days indigenous materials and farm planning based on manhandling, produced a compact group which harmonised with the landscape. In the new situation I would suggest that the design of prefabricated buildings should pay more attention to:

(a) Pitch in relation to the general proportion of the building, and modern methods of ventilation and insulation.

(b) The fitting and junction of the component parts particularly at gable ends and eaves.

(c) The protection of lower courses, the edges of cladding at corners, and of down spouts.

(d) Greater interchangeability of materials to suit a wide range of needs and to make their attachment easier.

(e) A softer tone of cladding for buildings which make those of no architectural merit less conspicuous in the landscape.

It is usually the sum total of these failings rather than any single one which produces the aggressively badly designed building. For instance a 22½° pitch looks quite well on a large span with a contrasting walling, but on a short span with the same sheets of small corrugations on the roof and four walls it creates an ugly featureless vulnerable box.

The Importance of Cladding

A change of tone or profile between roof and wall, and in most situations a low rather than a high tone is preferable, although in stone areas the lighter tones can fit in very well—or again look well in a building of a dramatic well-designed form. I have seen concrete frames and asbestos roofs look well until they are clumsily clad. I do not believe that the opportunity for fine buildings will be created by controls, nor do I believe the demand for them will come from the harassed, over-worked, cost-conscious small farmer. He is too apprehensive that improvement means more expense, not less. I believe the stimulus for improvement will come from the Ministry of Agriculture and its attitude to the administration of the grants for capital improvements and for experimental buildings.

Above all I think progress will come from a few leading manufacturers who set the pace by providing a better product within the resources of the market. I think they will do so through enlightened self interest, and I have great confidence in those with whom I have discussed this. I do, however, urge them to make a fundamental appraisal of the design problem. A design policy must be reinforced by conviction and the merits of a better product must be sold hard and with conviction.

Furthermore the makers of the raw materials can do a great deal to sponsor improvements, and by publicity to persuade farmers to take a pride in their buildings (as they do in their stock) and appreciate the importance of this design to their industry. The Agricultural Research Council and the RASE might run a design competition for manufacturers and show the results at the 1961 Royal Agricultural Show. Federations might discover that there is better business in co-operation than isolated competition. Architecture and building have become exportable commodities; will farm buildings take a share of the expanding world market for agricultural equipment which must continue if half the world is not to starve? It may all depend on design.

Farm Buildings in the Landscape

Paper by R. I. Maxwell, FRICS, MTPI, MIMunE

IF WE ARE GOING TO DEVISE a system under which agricultural buildings can be efficient and economical, look well in themselves and contribute to the overall appearance of the countryside, it is essential for those who design them and those who erect them to realise their full responsibilities. It is not enough for a building to be 'acceptable.' It has to be a good building, in every sense.

What points have to be considered in the design of an agricultural building? First and foremost, it must, of course, be capable of serving its purpose efficiently. If it does not do this, it has failed in its primary purpose and no degree of success in any other direction will counteract this failure. Second, it must be economical—which is not the same thing as being 'cheap.' It must be within the limits of the farmer's pocket, allowing for any financial assistance which may be available to him, and must be reasonable in price in return for what it offers and in relation to its expectation of life. The cheapest building is not necessarily the most economical, and the cost of maintenance has to be taken into account. Third, it must be a good-looking building in itself, and fourth, it must be of a design which, in the particular setting in which it is to be placed, will enable it to fit in well with its surroundings.

So far as fitting into the landscape is concerned, the design of the building is naturally one major factor, and the second, complementary, one is the siting. A farm building is provided to meet a specific need, and this need often exists in one definite place, leaving no room for compromise. However, in other cases there may be the possibility that the siting can be varied—either by a radical change of site or by a slight adjustment of the position in relation to the setting or to other nearby buildings. To take the extreme example, no planning officer would be fool enough to object to the placing of a water-tower on the top of a hill on the grounds that it was very conspicuous there, and there are many other cases in which the siting of an agricultural building may be determined by purely utilitarian factors. There are, however, other cases in which, by an adjustment of the site or design, the building can be made much more acceptable visually and still serve its purpose.

With regard to the materials of which farm buildings are constructed I have a fairly open mind. We have already established that the buildings must be efficient and not too expensive, and these considerations, together with other such obvious factors as speed of erection, mobility and internal flexibility, encourage the use of prefabricated designs. I see no reason why a building should necessarily be unsightly merely because it is prefabricated. However, I do see the strongest possible objection to adopting a prefabricated design purely because this is an easy solution and irrespective of whether it will look well in a particular setting. Also, the fact that a building is to be prefabricated is no reason why the subject of appearance can be disregarded in its design—on the contrary, if it is to be used in large numbers, it is a thousand times more important that the design should be right to start with.

Broadly speaking, a building which is well-designed from a functional and general viewpoint will look well in the landscape. By the same token, a building which is not designed for its purpose but which is merely an adaptation of another building will not look well and will frequently be inefficient.

The shape of a building is often largely dictated by the use to which it is to be put, but there is usually some room for manoeuvre without interfering with its efficiency, and a relatively small adjustment of the proportions can often do a great deal to help it to fit into a view.

Colour and Design

Colour is important, but it is not necessarily desirable to try to hide the building. The crofters' cottages are an outstanding example of how a building can be a striking feature in a landscape and yet not only fit into it, but even contribute to it. The essential thing is that we should think of the effect which the building will have on its surroundings before we decide upon its design and colour.

The new building techniques, and the new materials, are a challenge to us. They are not necessarily unacceptable in a landscape, and we do not have to follow the old designs or the old methods any more slavishly in the open countryside than we do in a cathedral precinct. The new materials and methods can be used to advantage, but we must think what the buildings are going to look like before we select or design them. A landscape must be a living thing, and it is only healthy if each generation makes a genuine contribution to it. Let us not, therefore, just copy the past, but let us be quite sure that anything new is not going to let the side down.

THE BUILDER CURRENT PRICES

THE information given on these pages has been specially compiled for *The Builder* and is copyright. It is the intention that the details given should indicate fair average prices of materials, not necessarily the highest or the lowest. The prices apply to large quantities of materials loaded at works, delivered at London Stations or at site in London Area as stated. Prices for smaller quantities ex merchant's warehouse will necessarily be higher so as to include the stocking and handling costs involved. It is recommended that the prices of materials should be confirmed by inquiry from suppliers and merchants.

AGGREGATES AND SAND

Delivered site in full lorry loads. Average of prices for Boroughs of Westminster, Paddington, Holborn and St. Pancras.

		£	s.	d.
Pit Ballast	per yd.	1	5	5
Pit Sand	,,	1	3	8
Washed Sand	,,	1	6	9
⅜ in. Shingle	,,	1	4	3
¾ in. Broken Brick	,,	1	0	9
Pan Breeze	,,	1	1	6
Fine or Coarse Foamed Slag Aggregate	per ton	3	8	0

2 yds. of fine and 2.6 yds. of coarse per ton.

CEMENT, etc.

Including non-returnable jute sacks or paper bags.

Best British Portland Cement. Standard Specification delivered Charing Cross area.

		£	s.	d.
6-ton loads and upwards, site	per ton	5	15	3
1 to 6 tons, site	,,	6	7	3
Rapid-Hardening Cement in 6-ton loads and upwards to site	,,	6	5	9
1 to 6 tons do. site	,,	6	17	9

Aquacrete Water Repellent Cement. 32s. 6d. per ton on ordinary cement prices.

Sulphate Resisting Cement. 32s. 6d. per ton on ordinary cement prices.

Red, Buff or Khaki Colorcrete in 6-ton lots	,,	8	15	3

Other colours according to colour.

In 4-ton lots from 313s. 3d. to 711s. 3d. per ton.

White Portland Cement	,,	14	0	9
Under 1 ton	per cwt.		17	1
417 Cement (Ultra Rapid Hardening) in 6-ton lots and upwards	per ton	7	7	9

Super Cement (Waterproof), 32s. 6d. per ton above Portland Cement.

Cullamix Tyrolean Finish, £11 13s.3d. to £14 8s.3d. (1-ton loads and upwards).

Ciment Fondu and Lightning Brands High Aluminous cement, 6-ton lots and up	,,	15	14	6
Stourbridge Fireclay, 6-ton loads at Railway Depot, London	,,	6	19	0
Stourbridge Fireclay, 6-ton loads (London sites)	,,	7	12	0
Moler Mortar Powder for Flue Bricks (London sites)	per cwt.	1	6	0

BRICKS

Full Loads		£	s.	d.
First Hard Stocks	per 1,000	16	19	6
Second Hard Stocks	,,	14	18	6
Mild Stocks (Kiln Burnt)	,,	11	5	0
Mild Stocks	,,	11	0	0

All loaded free into lorry at the works. The question of haulage is still very difficult and prices must be obtained from job to job.

2⅝ in. Nominal Fletton Bricks to sites in W.C. district:				
Commons	,,	6	12	0
Cellular Commons	,,	6	12	0
Keyed do.	,,	6	14	0
Rustics	,,	8	12	0
Cellular Rustics	,,	8	12	0
Single Bullnose Commons	,,	8	14	6
Sandfaced	,,	9	12	0
Tuscans	,,	10	7	0
Saxons	,,	10	15	0
Golden Buffs	,,	11	2	0
Dapple Light Facings	,,	11	9	6
Heather Facings	,,	11	5	0
Best Blue Pressed Staffs (London sites)	,,	33	4	9
do. Bullnose (London sites)	,,	34	3	9
Blue Wire Cuts (London sites)	,,	29	9	6
Midhurst Lime Bricks (London sites)	,,	11	13	0
Uxbridge Whites (London sites)	,,	11	8	6
Special Purpose Sandlime Bricks (London sites)	,,	9	2	0
Best Stourbridge Fire Bricks:				
2½ in. (London stations)	,,	32	14	0
2½ in. (London sites)	,,	33	2	9
3 in. (London stations)	per 1,000	39	4	6
3 in. (London sites)	,,	39	15	0
2⅞ in. Moler Flue Bricks (London sites)	,,	31	0	0
2⅝ in. Machine-made Sandfaced Red Facings (London sites)	,,	18	19	0
2⅝ in. Machine-made Multi Red Facings (London sites)	,,	19	4	0
2⅝ in. Hand-made Sandfaced Red Facings (London sites)	,,	20	17	6
2⅝ in. Hand-made Sandfaced Multi-Colour Facings (London sites)	,,	20	17	6
Hand-made Sandfaced Cherry Red Facings, Berkshire district (London sites)	,,	21	5	0
Hand-made Sandfaced Multi-Colour Facings, Berkshire district (London sites)	,,	21	5	0
Rubber Bricks for gauged arches (London sites)	,,	52	5	0
2⅝ in. Surrey Clamp Burnt Multi Stock Facings (London sites)	,,	16	15	0
2⅝ in. Surrey Kiln Burnt Multi Stock Facings (London sites)	,,	18	2	6
Glazed Bricks (London sites), White, Ivory, Brown:				
Stretchers	,,	64	0	0
Headers	,,	63	0	0
Quoins, Bullnose and 4½ in. Flats	,,	80	0	0
Double Stretchers	,,	85	0	0
Double Headers	,,	77	10	0
One side and two ends	,,	87	0	0
Two sides and one end	,,	89	10	0
Splays and Squints	,,	83	0	0

Cream and Buff, £3 extra over White. Other colours, hard glaze, £8 10s. 0d. extra over White. All above prices plus 47½% for Best quality and plus 47½% less 10% for Second quality.

PARTITION SLABS, etc.

Delivered Central London Area. (W.C. District).

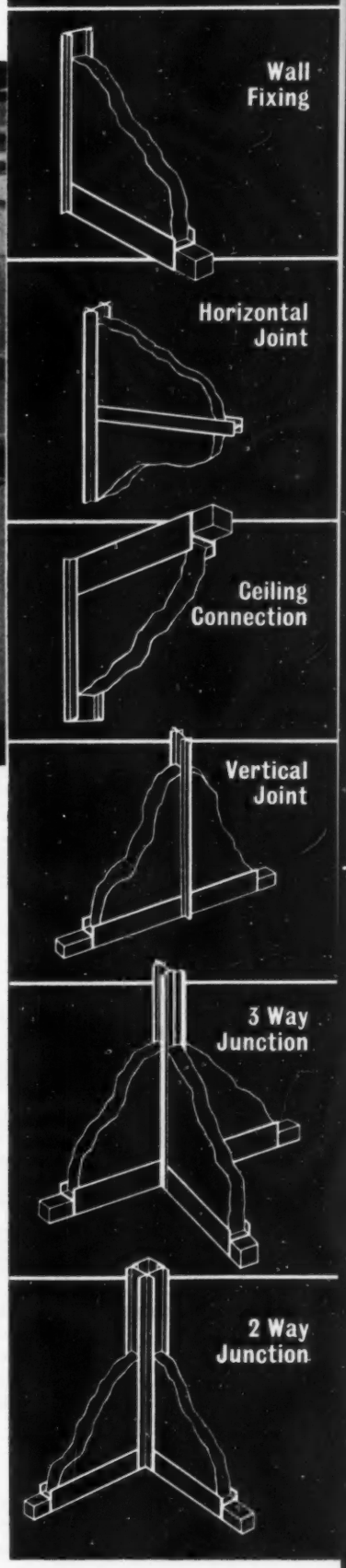
			£	s.	d.
Hollow Clay Partition Blocks (Keyed)					
Minimum lorry loads					
*2½ in.	140 yds.	per yd. sup.		4	7
Building Blocks (Keyed)					
*3 in. (6 cavity)	110 yds.	,,		5	9
*4 in. (6 cavity)	90 yds.	,,		7	3
6 in. (8¾ in. × 5¾ in.)	1,250 blocks	per 1,000	28	9	0

* Half blocks at no extra charge.

Clinker Concrete					
2 in.	100 yds.	per yd. sup.		3	11
2½ in.	85 yds.	,,		4	6
3 in.	75 yds.	,,		5	6
4 in.	55 yds.	,,		6	11
Cranham Terra Cotta					
2 in.		,,		7	5
2½ in.		,,		8	4
3 in. Load bearing quality		,,		9	6
4 in. do. do		,,		11	6
Moler Partition Blocks					
2 in.	150 yds.	,,		12	9
2½ in.	120 yds.	,,		13	9
3 in.	100 yds.	,,		14	9
4 in.	90 yds.	,,		17	0
Lightweight Concrete Building and Partition blocks of Various Sources of Manufacture					
2 in.	100 yds.	per yd. sup.		5	4
2½ in.	80 yds.	,,		6	5
3 in.	65 yds.	,,		7	5
4 in.	50 yds.	,,		9	4
4½ in.	44 yds.	,,		10	2
6 in.	33 yds.	,,		14	5
Thermalite-Ytong Partition Blocks					
2½ in.	144 yds.	,,		7	0
Thermalite-Ytong Load-Bearing Insulating Blocks					
3 in.	120 yds.	per yd. sup.		8	5
4 in.	90 yds.	,,		11	0
5 in.	72 yds.	,,		13	9
6 in.	60 yds.	,,		16	6
8½ in.	42 yds.	,,	1	3	8
Floor Blocks and Filler Tiles					
Floor Blocks 12 in. × 12 in. delivered in full lorry-loads:					
3 in.		per 1,000	35	14	0
4 in.		,,	38	9	0
5 in.		,,	46	1	0
6 in.		,,	52	12	0
7 in.		,,	64	12	0
8 in.		,,	75	9	0
9 in.		,,	83	2	0
10 in.		,,	92	0	0
Filler Tiles in multiples of 10 tiles per 1,000 multiples:					
12 in. × 3 in. × ⅝ in.		,,	43	13	0
12 in. × 4 in. × ⅝ in.		,,	75	7	0
10 in. × 5 in. × ⅝ in.		,,	75	7	0

Reduced Administration Costs...

STRUCTURAL DETAILS



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SC73

STONEWARE DRAIN PIPES, etc.

Glazed Stoneware Standard List (November, 1956).

		4 in.	6 in.	9 in.
Pipes, 2 ft. lengths	per ft.	1/8	2/6	4/6
Bends	each	5/-	7/6	20/3
Junctions	,,	8/4	12/6	27/-
Gullies with 4 in. outlets	,,	12/6	13/9	22/6

The following are the percentages to be added to the Standard List (November, 1956) prices delivered London Area.
Delivered ex Merchants Wharf or Depot.

	Over 2 tons	Over 100 pieces Under 2 tons	Under 100 pieces Under 2 tons
Best Quality ...	−5%	+15%	+20%
BSS Best Quality...	+10% − 5%	+10% +15%	+10% +20%
Tested Quality ...	+37½% − 5%	+37½% +15%	+37½% +20%
BSS Tested Quality	+47½% − 5%	+47½% +15%	+47½% +20%

		£	s.	d.
3 in. Land Drain Pipes (in 12 in. lengths)	per 1,000	12	10	6
4 in. do. do.	,,	16	16	0
6 in. do. do.	,,	34	10	0
9 in. do. do.	,,	64	19	0

DAMP COURSE

		£	s.	d.
Hessian base bitumen 7 lb. per yd. sup. in 24 ft. rolls cut to wall widths in lots of £6 value and over delivered London area	per yd. sup.		3	5
Asbestos base do. 7 lb. per yd. sup. do. do.	,,		5	2
Lead lined bitumen do. 9½ lb. per yd. sup. do. do.	,,		12	2
18 in. × 9 in. British damp course slates	per 1,000	43	8	11
14 in. × 9 in. do. do.	,,	32	8	2
9 in. × 9 in. do. do.	,,	18	18	9
18 in. × 4½ in. do. do.	,,	19	19	9
14 in. × 4½ in. do. do.	,,	15	18	3
9 in. × 4½ in. do. do.	,,	10	14	3

STONE

		£	s.	d.
Bath Stone				
Monks Park	per ft. cube		10	3
St. Aldhelm Box Ground	,,		11	6
Delivered in railway trucks at South Lambeth B.R. Western Region.				
Doulting Stone Random Blocks. Delivered London area	,,		10	10
Beer Stone. Delivered London area	,,		10	6
Portland Stone—				
Brown Whitbed in random blocks, 20 ft. average delivered in railway trucks at Nine Elms, B.R. Southern Region	,,		9	10
Yorkshire Stone—Blue Robin Hood Quality. Delivered to site London in 6-ton lots.				
9 in. × 3 in. Rubbed, weathered, throated and stolled cills	per ft. cube	4	5	10
12 in. × 6 in. do. do. do.	,,	3	1	2
12 in. × 3 in. Plain coping, twice throated	,,	2	7	6
12 in × 3 in. Weathered and twice throated coping	,,	3	3	3
14 in. × 6 in. do. do. do.	,,	2	17	0
4½ in. × 9 in. Plinth rubbed on top and face ...	,,	2	11	0
3 in. sawn two sides Slabs, random sizes	per ft. sup.		9	1
Templates and Cover Stones, 3 in., 4 in. and 6 in. thick, edges coped for rendered brickwork ...	per ft. cube	1	11	3
do. do. fair one edge for fair faced brickwork	,,	1	17	0
Hard York—				
12 in. × 2 in. Square Steps, rubbed on top and edge	per ft. run		11	0
14 in. × 3 in. Round-nosed Steps, rubbed on top and front	per ft. cube	2	18	3
12 in. × 6 in. Plain Steps, rubbed top and front	,,	2	11	0
2 in. Rubbed and Jointed Paving, given sizes ...	per ft. sup.		10	3
2 in. Sawn Paving, edges squared, in random sizes	per yd. sup.	3	12	0

TILES AND PANTILES

Delivered London area by road in 6 tons or over per 1,000.

	£	s.	d.
Machine-made Pantiles and French pattern Tiles from Lincolnshire district	35	16	6
Hand-made Pantiles Berkshire district	64	10	0
Hand-made Double Roman Bridgwater district	78	2	9
Hand-made 10½ × 6½ tiles Berkshire district	18	0	0
Machine-made 10½ × 6½ Staffordshire district	17	0	0
Hand-made Hip and Valley tiles per doz.	1	13	0
Machine-made Hip and Valley tiles do.	1	12	0
Concrete tiles 10½ × 6½	8	10	0
do. Interlocking (49S)	19	16	6

NOTE.—Breakage in transit, purchasers' responsibility.

SLATES

First-quality Slates from Penrhyn or Portmadoc, carriage paid in full truck loads to London Rate station. Per 1,000 actual.

	£	s.	d.
24 × 12	155	10	0
22 × 12	123	10	0
22 × 11	111	10	0
20 × 12	104	10	0
20 × 10	102	0	0
18 × 10	69	10	0
18 × 9	61	0	0
16 × 10	54	8	10
16 × 8	42	12	4

NOTE.—Breakage in transit, purchasers' responsibility.

TIMBER

			£	s.	d.
Softwood	Ex Wharf	per standard	£115 to £140		
Joinery quality					
Carcassing quality	do.	,,	£94 — £98		
1 in. Tongued and Grooved Flooring	do.	,,	£110	0	0
Hardwood					
Mahogany—African S.E.	do.	per ft. cube	1	10	0
do. Honduras S.E.	do.	,,	3	5	0
Oak European S.E.	do.	,,	2	10	0
do. Japanese S.E.	do.	,,	3	0	0
do. English Logs sawn ...	do.	,,	2	0	0
Teak 8 in. average S.E. ...	do.	,,	3	17	6
Walnut African Logs sawn ...	do.	,,	1	2	6
Plywood		per			
6 mm. (¼ in.) Birch Plywood B/BB		100 sq. ft.	4	6	9
6 mm. Israeli Gaboon do. B/BB exterior grade WBP (AX100)		,,	4	5	3
18 mm. Birch Blockboard		,,	9	9	6
¾ in. Douglas Fir Plywood 96 in. × 48 in. Exterior grade WPB (AX100) solid two sides		,,	9	6	9

DOORS (in Lots I-II)

Delivered London area.

		£	s.	d.
1½ in. 4 Horizontal Panel. Pattern 4 in. deal				
2 ft. 0 in. × 6 ft. 6 in.	each	1	16	0
2 ft. 3 in. × 6 ft. 6 in.	,,	1	17	6
2 ft. 6 in. × 6 ft. 6 in.	,,	1	18	6
2 ft. 9 in. × 6 ft. 6 in.	,,	2	0	6
2 in. do. but top panel open. Pattern 4 × G in deal				
2 ft. 6 in. × 6 ft. 6 in.	,,	2	9	0
2 ft. 9 in. × 6 ft. 6 in.	,,	2	11	6
2 in. 2 Panel top panel open. Pattern 2 × G in deal				
2 ft. 6 in. × 6 ft. 6 in.	,,	2	3	0
2 ft. 9 in. × 6 ft. 6 in.	,,	2	5	0
1½ in. Plywood Faced Flush Doors to BS459, Part 2A				
2 ft. 0 in. × 6 ft. 0 in.	,,	1	12	3
2 ft. 0 in. × 6 ft. 6 in.	,,	1	12	3
2 ft. 3 in. × 6 ft. 6 in.	,,	1	13	9
2 ft. 6 in. × 6 ft. 6 in.	,,	1	15	3
2 ft. 9 in. × 6 ft. 6 in.	,,	1	18	0
1½ in. Hardboard Faced Flush Doors				
2 ft. 0 in. × 6 ft. 0 in.	,,	1	5	6
2 ft. 0 in. × 6 ft. 6 in.	,,	1	6	0
2 ft. 3 in. × 6 ft. 6 in.	,,	1	6	6
2 ft. 6 in. × 6 ft. 6 in.	,,	1	8	6
2 ft. 9 in. × 6 ft. 6 in.	,,	1	9	6

SUNDRIES

Delivered London area.

		£	s.	d.
1 in. Wood Wool Slabs 6 ft. 0 in. × 2 ft. 0 in. in quantities of 1 ton (67 yds. to 1 ton)	per yd.		6	2
1½ in. do. (67 yds. to 1 ton)	,,		8	0
2 in. do. (52 yds. to 1 ton)	,,		9	9½
2½ in. do. (45 yds. to 1 ton)	,,		11	3
3 in. do. (39 yds. to 1 ton)	,,		12	7½
Quantities under 1 ton add 1d. per ½ in. of thickness				
½ in. imported or home produced insulation Board, quantities over 5,000 sq. ft.	per 100 sq. ft.	2	2	6
⅛ in. Hardboard do.	,,	1	17	6
5/16 in. do. do.	,,	2	4	6
2 in. Compressed Straw Slabs, roofing quality. 6 ft., 8 ft., 9 ft., 10 ft., and 12 ft. × 4 ft.				
50–100 yds.	per yd. sup.		11	4
101–250 yds.	,,		10	10
251–750 yds.	,,		10	1
Over 750 yds.	,,		9	4
2 in. do. for partitions 4d. per yd. cheaper.				
3/16 in. Asbestos Flat Building Sheets...	,,		4	3½
¼ in. do. do. do.	,,		6	0
Roofing Felt 1-ply	,,		1	9
do. 2-ply	,,		2	2½
Best Scotch Glue in slabs	per ½ cwt.	5	3	9
do. pearl	,,	5	3	9
Croid Glue	28 lb.	2	6	0
Impact Adhesive	per gall.	2	12	0
Cut Nails 3 in. (1-ton lots)	per ton	84	10	0
do. 4 in. and up (1-ton lots)	,,	81	0	0
Wire Nails 3 in. (4-cwt. lots)	per cwt.	3	19	2
do. 4 in. and up (4-cwt. lots)	,,	3	16	6

METALS

STEEL JOISTS, ETC.

		£	s.	d.
Basis Joists— 6 in. × 5 in., 8 in. × 5 in., 8 in. × 6 in., 10 in. × 6 in. 12 in. × 6 in., plain cut to lengths delivered London area	per ton	47	15	0
Extra for sizes				
3 in. × 1½ in. 4 in. × 1¾ in.	,,	3	10	0
3 in. × 3 in.	,,	2	10	0
4 in. × 3 in.	,,	2	5	0
10 in. × 4½ in.	,,	1	10	0
5 in. × 2½ in. 5 in. × 3 in.	,,	1	15	0
4¾ in. × 1¾ in.	,,	3	5	0
5 in. × 4½ in. 7 in. × 3½ in. 13 in. × 5 in. ...	,,		15	0
6 in. × 3 in. 24 in. × 7½ in.	,,	2	0	0
6 in. × 4½ in. 7 in. × 4 in. 8 in. × 4 in. 9 in. × 4 in. 10 in. × 5 in.	,,	1	5	0
12 in. × 5 in. 22 in. × 7 in.	,,	1	0	0

METALS—*continued*

		£	s.	d.
9 in. × 7 in. 10 in. × 8 in. 12 in. × 8 in.	per ton		10	0
14 in. × 5½ in. 14 in. × 6 in. 14 in. × 8 in.	per ton		10	0
15 in. × 5 in. 15 in. × 6 in. 16 in. × 6 in.	per ton		10	0
16 in. × 8 in. 18 in. × 6 in. 18 in. × 7 in.	per ton		10	0
18 in. × 8 in. 20 in. × 6½ in. 20 in. × 7½ in.	per ton		10	0
Steel angles average price	,,	48	15	0
Steel tees average price	,,	49	15	0
Fabricated work delivered London—				
R.S. Joists cut and fitted...	,,	67	19	0
Compound girders...	,,	72	14	3
Stanchions	,,	78	9	9
Compound stanchions	,,	83	4	3
In Roof Work—Trusses and Purlins	,,	93	19	6
Average prices not for awkward work.				
Angle cleats and ½ in., ¾ in. and ⅞ in. bolts average price London area	per cwt.	5	10	0

Ferro-Concrete Bars and Fabric

Mild Steel Ferro-Concrete Bars British manufacture to BSS 785 ex. Mills. 1 in. diameter and upwards delivered nearest London station ...	per ton	40	10	0
do. do. ex. London Stock do. delivered London site	,,	49	10	0
Extras—				
¼ in. diam....	per ton extra	8	12	6
5/16 in. do.	,,	6	12	6
⅜ in. do.	,,	4	12	6
⅞ in. do.	,,	3	2	6
⅞ in. do.	,,	1	10	0
⅞ in. and ⅞ in. diam.	,,		15	0
Steel wire mesh reinforcing fabric to BSS 1221A.				
Ref. No. 106 ... ... 7.88 lbs.	per sq. yd.		5	2
,, ,, 109 ... ... 4.71 ,, ...	,,		3	0½
,, ,, 113 ... ... 1.83 ,, ...	,,		1	8½
,, ,, 122 ... ... 7.32 ,, ...	,,		4	10½
,, ,, 125 ... ... 4.32 ,, ...	,,		2	10½

Mild Steel Tubes

Tubes to BSS 1387. Fittings BSS 1740.

Basic List Prices

		¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Tubes	per ft.	9¾	10	1/-	1/2½	1/9	2/3	2/8	2/9
Bends	each	1/7	1/9	2/-	2/6	3/8	5/5	6/2	10/7
Elbows, square	,,	1/8	1/10	2/2	2/6	3/-	4/4	5/2	8/6
do. round	,,	1/10	2/-	2/4	2/10	3/4	4/8	5/8	9/4
Tees	,,	2/-	2/2	2/6	3/2	3/8	5/-	6/2	10/2
Crosses... ...	,,	4/4	4/8	5/6	6/6	8/2	11/-	13/2	21/-
Sockets, Plain	,,	6	6	8	10	1/-	1/4	1/9	2/6
do. Diminished	,,	8	10	1/-	1/2	1/6	2/-	2/8	4/-
Backnuts ...	,,	4	4	6	7	10	1/-	1/4	2/2

Malleable Fittings

		¼ in.	⅜ in.	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Elbows, round	each	8½	8½	9½	1/2½	1/8½	2/7½	3/6	5/-
Tees	,,	9½	9½	1/-	1/4¾	2/-	2/9½	4/-	5/6
Crosses... ...	,,	1/2½	1/2½	1/4¾	2/-	2/9½	3/7½	5/2½	7/2½
Sockets... ...	,,	5¾	5¾	7	9½	1/-	1/7½	2/2½	3/1½
Backnuts ...	,,	3	3	3½	4½	5¾	7¾	10½	1/5½

Discounts from List prices as follows :—

Galvanised Tube—

	Under 1 ton	Over 1 ton	W.I. Fittings	Malleable Fittings
Light	−38¾%	−40½%	Light −25½%	Malleable List
Medium	−34¾%	−36½%	Heavy −21¾%	−14% + 40%
Heavy	−27 %	−28¾%		

Black—

Light	−49 %	−50¾%	Light −31½%	Malleable List
Medium	−45 %	−46¾%	Heavy −27¾%	−14%
Heavy	−37¼%	−39 %		

C.I. Half-Round Gutters

Delivered London per yd. in 6 ft. lengths.

	Gutters	Nozzles	Stop Ends
3 in.	4/2½	3/9	1/1
3½ in.	4/7	4/1	1/1
4 in.	5/11	4/7	1/7
4½ in.	6/6	5/1	1/11
5 in.	7/3	5/6	2/3

C.I.O.G. Gutters

Per yd. in 6-ft. lengths :

	Gutters	Nozzles	Stop Ends
3 in.	5/5	4/11	1/3
3½ in.	6/-½	4/11	1/7
4 in.	6/8½	5/1	1/11
4½ in.	7/3	5/10	2/3
5 in.	7/11	6/8	2/7

C.I. Rain-Water Pipes

	Pipes	Bends	Branches
2 in.	8/11½	4/7	6/7
2½ in.	8/11½	5/1	8/10
3 in.	10/1	6/5	9/7
3½ in.	11/6	7/7	11/6
4 in.	13/3½	9/2	13/7

L.C.C. Coated Soil Pipes

2 in.	10/2½	7/10	9/7
2½ in.	10/9	8/9	11/11
3 in.	12/1	9/7	14/2
3½ in.	13/6	11/11	16/6
4 in.	15/4½	13/4	19/5

Above prices for gutters, rain-water and soil pipes for under 5-cwt. lots only. Lots over 5 cwt. see List No. 3300, dated February 1, 1955, plus 27½% and tonnage allowance. 4-ton lots 5%, 2-ton lots 2½%.

L.C.C. Coated Drain Pipes

		£	s.	d.
4 in. diameter in 9 ft. lengths	per yd. run	1	11	1
6 in. do. do.	,,	2	5	6
4 in. diameter bends	each		19	9
6 in. do. do.	,,	2	12	8
4 in. diameter branches	,,	1	15	1
6 in. do. do.	,,	4	4	2

Above prices for any quantity but under 5 cwt. carriage extra.

Pitch Fibre Drain Pipes

2 in. diameter in 5 ft., 5 ft. 6 in. or 8 ft. lengths including couplings	per ft. run	1	6½
3 in. do.	,,	1	10½
4 in. do.	,,	2	6
5 in. do.	,,	4	1½
6 in. do.	,,	5	0½
4 in. diameter short radius ¼ bends	each	17	9
4 in. do. do. ¼ bends	,,	12	11
2 in. diameter 6 ft. radius bends (5 ft. lengths)	,,	16	2
3 in. do. do. do.	,,	19	8
4 in. do. do. do.	,,	1	7	4
5 in. do. do. do.	,,	2	4	0
6 in. do. do. do.	,,	2	14	6

Above prices for loads of £60 and over.
Loads £25 to £59 19s. 11d. Plus 10%
Loads under £25 ... Plus 15%

Asbestos Rain-Water Pipes and Fittings

All less 17½% discount.	2 in.	2½ in.	3 in.	4 in.
Pipes, 6 ft. lengths ... ... per yd.	4/7	4/10½	5/11	7/10
Shoes ... ... each	3/-	3/3	3/10	5/2
Single Branches ... ... ,,	4/8	5/6	6/7	9/2
Bends, square or obtuse ... ,,	3/3	3/7	4/8	6/7
Swan Necks, 4½ in. proj. ... ,,	3/7	4/8	5/2	7/3
do. 6 in. do. ... ,,	3/10	5/2	5/10	7/10

Asbestos O.G. Gutters and Fittings

	4 in.	4½ in.	5 in.	6 in.
Gutters, 6 ft. lengths ... per yd.	4/4	4/9½	5/9	6/10½
Drop ends ... ... each	3/6	4/-	4/9	5/5
Stop ends ... ... ,,	1/1	1/2	1/3	1/5
Angles ... ... ,,	3/7	4/1	5/-	5/10
Nozzles ... ... ,,	3/6	4/-	4/9	5/-
Union Clips ... ... ,,	1/9	2/1	2/6	2/11

Asbestos Half-Round Gutters and Fittings

	per	3 in.	4 in.	4½ in.	5 in.	6 in.
Gutters, 6 ft. lengths	yd.	3/0½	3/7½	3/8½	4/4½	6/1
Drop ends	each	2/6	3/-	3/3	3/7	5/2
Stop ends	,,	1/-	1/1	1/2	1/3	1/5
Angles	,,	2/10	3/3	3/7	3/10	5/2
Nozzles	,,	2/6	3/-	3/3	3/7	5/2
Union Clips	,,	1/3	1/4	1/5	1/7	2/5

	Per ton basis in London £	s.	d.
Iron—Staffordshire Crown Merchant Quality	52	17	6
Mild Steel Bars	47	8	6
Mild Steel Hoops	49	0	0

	Ex Merchant's Stock per ton Two-ton lots £	s.	d.
Soft Sheets C.R. and C.A.—			
20 gauge	62	7	6
24 gauge	64	17	6
26 gauge	67	17	6
Galvanised Corruguated Sheets, 6-ft. to 9-ft.—			
20 gauge	70	4	0
24 gauge	73	14	0
26 gauge	78	19	0
Galvanised Flat Sheets C.R. and C.A.—			
20 gauge	71	14	0
24 gauge	75	4	0
26 gauge	80	9	0

ALUMINIUM AND ALUMINIUM ALLOYS

(Base Prices)		£	s.	d.
Sheet BS 1740 S1C 18 SWG (36 in. wide)... ...	per lb.		3	0½
Sheet BS 1470 NS3 Utility 18 SWG (36 in. wide)	,,		2	11½
Coiled strip BS 1470 S1C 18 SWG (24 in. wide)	,,		2	11½
Coiled strip BS 1470 NS3 Utility 18 SWG (24 in. wide)...	,,		2	11
Coiled strip, high purity, 22 SWG (12 in. wide)	,,		3	2
Corrugated sheet BS 1470 NS3 Circular Profile 8 ft. × 32 in. × 20 SWG	per sheet	1	14	1
Corrugated sheet BS 1470 NS3 Industrial Profile 8 ft. × 31¾ in. × 20 SWG	,,	1	19	10
Corrugated sheet BS 1470 NS3 Mansard Profile 8 ft. × 31¾ in. × 20 SWG	,,	1	13	1
Extruded section BS 1476 E1C simple moulding	per lb.		2	10½
Extruded section BS 1476 E1C 1 in. diam. round	,,		2	8
Extruded section BS 1476 HE19WP simple angle	,,		3	2
Extruded section BS 1476 HE19WP 1 in. diam. round	,,		3	1
Tubing BS 1471 T1C 1½ in. O/D × 20 SWG ...	,,		4	8
Tubing BS 1471 HT19WP 1½ in. O/D × 20 SWG	,,		6	3

PLUMBERS' BRASS WORK, etc.

Delivered in London area.

All per dozen	B.S.S. ½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Screwdown bib cocks Crutch head for iron...	87/-	128/-	—	—	—	—
Toilet bib cocks for iron ...	109/-	158/5	—	—	—	—

Crown 75 was too good... it earned us a black mark.

The demand for Crown 75 surprised even us:—and our trouble has been to keep pace with it. As a result we have got black marks for delivery. That phase is now over. We began making Crown 75 two years ago on one plant; a year ago we got a second into production; we now have three. Now, we *can* keep pace and can offer short deliveries. In fact, we are ready to deliver Crown 75 when you want it, where you want it and in any quantity you ask for. So you, the architect can specify Crown 75 with certainty of not having to accept 'or equal'—for there *is* none.

Builders will save on costs since Crown 75 can now be delivered to the site precisely when it is needed.

FIBREGLASS CROWN 75

For all STRUCTURAL INSULATION

FIBREGLASS LTD · ST. HELENS · LANCS · TEL: ST. HELENS 4022

STAIR

1 stär; 2 stär, n. 1 . . . A step, or one of a series of steps for mounting or descending from one level to another . . . usually in the plural *(Funk & Wagnalls Dictionary)*

THE *Braby* DEFINITION

Strong, light, versatile stair units pressed from steel and ready for assembly on site, able to grow with the structural framework of a building so that workmen may mount and descend from one level to another during construction; prepared to take finishes of granolithic, terrazzo, timber, marble, or rubber so that they may be elegant as well as functional when the building is complete.

Braby also manufacture fire escape stairs.

Other Braby components for the Architect include curtain walling and metal windows in steel and aluminium; metal partitions; copper, zinc and aluminium roofing; pressed-steel door frames.

ARCHITECTURAL DIVISION
FREDERICK *Braby* & CO LTD

HEAD OFFICE: BRABY HOUSE SMITHFIELD ST. LONDON E.C.1.
TELEPHONE: CENTRAL 2388

CRAYFORD LIVERPOOL GLASGOW BRISTOL BELFAST PLYMOUTH

MEMBER OF BRABY OF BRITAIN GROUP

AP 21

PLUMBERS' BRASS WORK, etc.—*continued*

All per dozen	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
Screwdown stop cocks for iron	66/-	95/9	188/-	363/-	522/6	917/6
do. with two unions for lead	89/-	132/-	234/4	472/-	623/6	1,389/6
Double nut boiler screws ...	18/8	26/5	47/6	48/6	67/-	93/6
Heavy Croydon ball valves ...	77/-	193/6	312/5	568/8	734/10	—
Plumbers' union brass lead to iron	19/6	23/6	38/6	52/10	70/6	165/-
	1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
Caps and Screws	33/-	40/8	59/6	92/5	118/10	155/3
Brass Sleeves	—	31/11	31/11	56/2	74/10	91/5
	1½×6 lb.	1½×6 lb.	2×7 lb.	3×7 lb.		
Lead P. trap with brass cleaning screws	68/6	85/6	137/-	233/9		
Lead S. trap do. do.	82/9	102/9	168/3	302/3		

Solder :				s.	d.
Plumbers' ...	1 cwt. lots	320/-	14 lb. lots per lb.	3	7
Tinmen's	" "	404/-	" " "	4	5
Blow pipe ...	" "	407/-	" " "	4	6

Copper Tubes and Sheets

Copper tubes BSS 659/1944 on the basic price of 27¾d. per lb. plus gauge and manufacturing extras as follows. Minimum quantities, 10 cwt.

	Extra d.		d.		d.
⅛ in. × 19 gauge	16¼	Total per lb.	43⅜	Approx. per ft.	11¾
¾ in. × 19 "	14⅜	" "	41¾	" "	16¼
1 in. × 18 "	12⅞	" "	40¼	" "	25
1¼ in. × 18 "	12¼	" "	39⅝	" "	30
1½ in. × 18 "	12¼	" "	39⅝	" "	36
2 in. × 17 "	13⅞	" "	41¼	" "	57¾

Small Quantity extras :

10 cwts. to 5 cwts.	plus ½d. per lb.
5 cwts. to 2 cwts.	" 1d. "
2 cwts. to 1 cwt.	" 2d. "

Rolled Copper sheets up to 48 in. wide, basic price plus gauge and manufacturing extras ... ... £ 268 0 0

Zinc

		£	s.	d.
Sheet Zinc, 10 gauge (25 SWG), 5 cwt. lots upwards	per cwt.	7	18	9
" " 12 gauge (23 SWG), " " "	"	7	18	3
" " 14 gauge (21 SWG), " " "	"	7	17	0

Brass Tube

Brass tubes, basic price, plus gauge and manufacturing extras ... ... per lb. 1 10½

LEAD SHEET AND PIPES

Basis selling price to one address in London or Home Counties :

		£	s.	d.
Lead Sheet, English, 3½ lb. substance and upwards	per ton	104	15	0
" Water Pipe, in coils	"	107	0	0
Lead Soil Pipe, 10 ft. or over 2 in. to 4 in. in dia.	"	108	10	0
" " " over 4 in. dia.	"	110	10	0
" Gas or Untinned Compo pipe...	"	108	10	0

5 cwt. lots and over less 6d. per cwt. off basic prices.

Extras over Basis for quantities under 5 cwt. :

3 cwt. and under 5 cwt.	per cwt.	4	0
1 cwt. do. 3 cwt.	"	6	0

Smaller quantities than 1 cwt. priced specially.

Supplying sheet lead and lead pipes to less than basis weights and cutting to sizes less than basis charged extra according to current trade schedule.

Allowance for Old Lead, collected, £53 0s. 0d. per ton weighed at buyer's works.

PLASTER, etc.

		£	s.	d.
Coarse Pink in 1-ton loads and over delivered on site	per ton	8	11	3
do. White do. do. do.	"	9	0	9
Sirapite Coarse BSS 1191 Class C do.	"	9	2	9
do. Fine do. do. do.	"	9	10	6
do. Browning BSS 1191 Class B do.	"	9	2	9
do. Board Finish do. do.	"	9	2	9
Blue Lias Lime, in 6-ton loads	"	6	17	6
Hydrated Lime (Grey) in 6-ton loads	"	5	10	0
do. (White) do.	"	6	0	0
Lump Lime (Grey) do.	"	5	7	0
do. (White) do.	"	5	14	6
White Keen's or Parian Cement, in 1-ton loads ...	"	12	7	6
Pink Keen's or Parian Cement, in 1-ton loads ...	"	12	2	3
Granite Chips, in 6-ton loads	"	2	6	9
Hair	per cwt.	4	17	6
Gypsum Plaster Lath or Base Board, ⅜ in. thick, 600 yds. and over in one delivery. Delivered site	per yd.		2	2½
1,200 yds.	"		2	1½
do. Insulating do. ⅜ in. thick, 600 yds. and over in one delivery. Delivered site	"		2	8
1,200 yds.	"		2	7
Gypsum Plaster Wall Boards, 3 and 4 ft. wide 6 to 12 ft., ⅜ in. thick, 600 yds. and over in one delivery. Delivered site	"		2	5½
1,200 yds.	"		2	4½
do. Insulating do. ⅜ in. thick, 600 yds. and over in one delivery. Delivered site	"		2	11
1,200 yds.	"		2	10

PAINTS AND DISTEMPER

Delivered London area.		£	s.	d.
Ceiling Distemper	per cwt.	1	7	6
Washable Distemper	"	5	15	0
Gloss Paint	per gal.	2	16	0
Super Snowcem cement paint (in 1 cwt. drums) ...	per cwt.	5	0	0

Lead Products and Oils

		£	s.	d.
Ground White Lead, in 1 cwt. kegs	per cwt.	8	7	6
Genuine White Lead Paint, 1-19 gal. lots in 1 gal. tins	per gal.	3	6	6
Genuine Red Lead, Dry, 1 cwt. keg (10 ton lots)	per cwt.	5	12	6
do. do. do. (1 cwt. lots)	"	6	19	0
Genuine Linseed Oil Putty, 1 cwt. keg	"	2	13	6
Size XD quality 28 lb.	per tin		9	0
Raw Linseed Oil (5 gal.) drums extra	per gal.		16	9
Boiled Linseed Oil (5 gal.) do.	"		17	8

Sundries

Turpentine substitute (5 gal.) drums extra ...	"		5	4½
do. do. (40 gal.) do.	"		4	8½
Solignum, Brown (5 gal. cans) Exterior	"		10	0
Creosote (40 gal. barrels)	"		2	3
Paste Powder (1 lb. packets)	per lb.		2	4
White Lining Paper	per piece		1	2

VARNISHES, etc.

Delivered London area.		£	s.	d.
Oak Varnish, Outside or Inside	per gal.	2	0	0
Oak, Pale Copal do. do.	"	2	0	0
Hard Drying Oak for Inside	"	2	5	0
Crystal Paper Varnish do.	"	2	8	0
Eggshell Flat Varnish do.	"	2	2	0
Finest Carriage Varnish	"	2	7	0
Front Door Varnish	"	2	4	0
Japan Gold Size	"	1	12	0
Black Japan	"	1	16	0
Brunswick Black	"	1	12	0
Berlin Black	"	1	10	0
Terebene	"	1	12	0
Knotting (1 gal. bottles free)	"	1	15	0
French and E sh Polish (do.)...	"	1	15	0

GLASS

Delivered London area.		s.	d.
18 oz. Sheet Glass Ordinary Glazing Quality— Cut Sizes...	per ft. sup.		10
24 oz. do. do. do. do.	"	1	0½
26 oz. do. do. do. do.	"	1	3
32 oz. do. do. do. do.	"	1	7½
⅛ in. Rolled Plate...	"	1	3¾
3/16 in. Rolled and Rough Cast...	"	1	6½
¼ in. do. do.	"	1	7½
⅛ in. Figured Rolled and Cathedral, Standard patterns—			
White Group 1	"	1	3¾
do. Group 2	"	1	9¾
do. Standard Tints	"	2	1½
do. Special Tints	"	7	3
⅛ in. Pinstripe, Hammerstripe, Reeded, Reedlyte and Luminating Group 3	"	1	8½
¼ in. Wired Cast up to 50 in.	"	1	10½
¼ in. do. do. 50 in. to 72 in.	"	2	2¼
¼ in. Georgian Wired Cast	"	1	11

Hollow Glass Blocks—				
P.B.2	Cross reeded	5¾ × 5¾ × 3⅞ in.	each	3 9
P.B.3	Broad reeded	7¾ × 7¾ × 3⅛ in.	"	5 9
P.B.32	Cross reeded	7¾ × 7¾ × 3⅛ in.	"	5 9
P.B.4	Prismatic	7¾ × 7¾ × 3⅞ in.	"	6 6
P.B.5	Flemish	7¾ × 7¾ × 3⅛ in.	"	5 9
P.B.6	Boomerang	7¾ × 7¾ × 3⅛ in.	"	6 6

Half Size Blocks—				
P.B.32	Cross reeded	7¾ × 3¾ × 3⅞ in.	"	4 10

Radiused Corner Blocks to match up with—				
P.B.2	Cross reeded	"	8 1
P.B.3	Broad reeded...	"	9 8
P.B.32	Cross reeded	"	9 8

P.B.2, P.B.3, P.B.32 are also supplied in Light Diffusing Blocks at same price.

¼ in. Polished Plate Glass, G.G. quality—			
In plates not exceeding 2 ft. sup.	per ft. sup.	4	7
" " " 5 ft. sup.	"	5	7
" " " 45 ft. sup.	"	7	6
" " " 100 ft. sup.	"	7	6
¼ in. Polished Plate, extra sizes, *i.e.*, plates exceeding 100 ft. sup. or 160 in. one way or 96 in. both ways. G.G. quality—Not exceeding 135 ft. sup. or 240 in. one way or 130 in. both ways ...	"	11	4
Not exceeding 180 ft. sup. or do.	"	15	0

Plates exceeding 180 ft. sup. prices on application.

Substances other than ¼ in. Polished Plate at Special Prices.

Quantity Tariff—Sheet and Sundry Glass.

The following prices apply to minimum quantities of one size and one pattern delivered by the manufacturer to one site at one time.

Description of Glass—	Minimum quantity	per ft. sup. s.	d.
18 oz. sheet O.Q.	3,000		7⅛
24 oz. " "	2,000		9¼
26 oz. " "	2,000		11⅛
32 oz. " "	2,000	1	3¼
⅛ in. Rolled Plate...	1,000		10⅞
⅛ in. Figured Rolled and Cathedral Standard Patterns, White Group 1	1,000		10⅞
do. Group 2	1,000	1	2⅛
⅛ in. Pinstripe, Hammerstripe, Reeded, Luminating and Spotlyte Group 3	1,000	1	2⅜
3/16 in. Rolled Plate or Rough Cast	2,000	1	2
¼ in. do. do.	2,000	1	2¾
¼ in. Wired Cast, Hexagonal up to 50 in ...	2,000	1	5
¼ in. do. do. do. 50 in. to 72 in. ...	2,000	1	9
¼ in. Georgian Wired Cast	2,000	1	5¼

THE BUILDER RATES OF WAGES

AS FROM FEBRUARY 6th., 1961. (Every endeavour is made to ensure accuracy but we cannot be responsible for errors)

1. Craftsmen and Labourers.

Region	Craftsmen	Labourers
	s. d.	s. d.
England & Wales (Grade A) ...	5 0	4 4½
London	5 1½	4 6
Liverpool and District ...	5 1½	4 6
Scotland... ...	5 0	4 4½

2. Apprentices.

Age	Per cent. of Craft Rate	London and Liverpool Dist.	England, Wales
		s. d.	s. d.
15	25	1 3½	1 3
16	33½	1 8½	1 8
17	50	2 6½	2 6
18	62½	3 2½	3 1½
19	75	3 10½	3 9
20	87½	4 6	4 4½

3. Young Male Labourers.

Age	Per cent. of Craft Rate	London and Liverpool Dist.	England, Wales and Scotland
		s. d.	s. d.
15	33½	1 6	1 5½
16	45	2 0½	1 11½
17	66½	3 0	2 11
18	100	4 6	4 4½

NORTHERN IRELAND is not included; rates fluctuate so much from district to district that reference should be made to local offices.
WATCHMEN.—The rates per shift for watchmen engaged on building sites is 27s. 6d. in London and Liverpool District, and 26s. 3d. in the provinces.
FEMALE OPERATIVES.—In all districts throughout the country except in Scotland the rate of wages for women, aged 19 and over, engaged in craft processes is 4s. 1½d. per hour. Women engaged on work other than craft processes, 3s. 9½d. per hour. In Scotland the rate for the woman craftsman is 4s. 4½d. after a probationary period, and the woman labourer, 3s. 10½d.

New Companies

THE FOLLOWING NEW COMPANIES, registered in England, have been announced by Jordan and Sons, Ltd., company registration agents.

LUBENHAM CONTRACTING CO. LTD. — Regd. April 18, 1961. Bldg. and civil engrg. contrs., etc. Nom. cap.: £2,000. Sub.: Spencer G. Douglas, Ash Cottage, Collingtree, Northampton.

WOODCRAFT (MORECAMBE) LTD.—Regd. April 18, 1961. 19a Bare-la., Morecambe & Heysham, Lancs. Sec.: E. Wright. Joiners, carpenters, etc. Nom. cap.: £1,000.

T. E. YEOMANS & SONS LTD.—Regd. April 19, 1961. 159a St. Leonards-rd., Poplar, E14. Sec.: T. E. Yeomans. Bldrs., contrs., etc. Nom. cap.: £2,000.

F. G. WHITLEY & SONS CO. LTD.—Regd. April 19, 1961. Ledbrooke, Padeswood-rd., Buckley, Flints. Sec.: J. A. Whitley. Pblc. wks. contrs., etc. Nom. cap.: £5,000.

L. & F. JOINERY LTD.—Regd. April 19, 1961. Hascombe, Brooklyn, nr. Woking, Surrey. Sec.: Mrs. P. M. Larmer. Nom. cap.: £100.

WILLIAM C CROUCH LTD.—Regd. April 19, 1961. 3 Endwell-rd., Bexhill-on-Sea, Sussex. Sec.: B. W. Fletcher. Bldr. and contr., etc. Nom. cap.: £100.

NORTHERN PLANT & CONSTRUCTION CO. LTD.—Regd. April 19, 1961. Sec.: Emmanuel N. Oliva. Bldg., civil engrg. and pblc. wks. contrs., plant hire specialists, etc. Nom. cap.: £100. Sub.: Emmanuel N. Oliva, 38 Bankburn-rd., Liverpool, 13.

G. J. HINDLE (CONTRACTS) LTD.—Regd. April 19, 1961. Willows-la., Sawmills, Back Clifton-st., Accrington, Lancs. Joiners, carpenters, etc. Nom. cap.: £1,000. Dir.: Gerald J. Hindle, 33 Sandy-la., Accrington.

G. A. EDWARDS (FOUR OAKS) LTD.—Regd. April 19, 1961. Pblc. wks., contrs., bldrs., etc. Nom. cap.: £1,000. Sub.: Mrs. Dorothy C. Cross, 47 Coronation-rd., Walsall Wood, nr. Walsall.

BERRIDGE & WILSON LTD.—Regd. April 20, 1961. 79 King-st., Leicester. Sec.: E. W. Smith. Bldrs., etc. Nom. cap.: £2,000.

JOSEPH WILKINSON (BUILDER) LTD.—Regd. April 20, 1961. 297 Hoylake-rd., Moreton, Wirral, Ches. Sec.: Maureen Wilkinson. Bldr., etc. Nom. cap.: £5,000.

R. H. RIDD, B. PAINE & CO. LTD.—Regd. April 20, 1961. 39-40 County-chbrs., Weston-rd., Southend-on-Sea. Sec.: Ella D. Ridd.: Pntg. contrs., etc. Nom. cap.: £1,000.

HAROLD L. BATES (HOUSING) LTD.—Regd. April 20, 1961. 42 Queens-rd., Coventry. Bldrs., etc. Nom. cap.: £1,000. Sub.: Harold L. Bates, 996 Broad-la., Coventry, 1.

M. J. ALLUM & CO. LTD.—Regd. April 21, 1961. 8 Forbury, Reading, Berks. Sec.: Elizabeth H. Dale. Pntrs. and decrs., etc. Nom. cap.: £1,000.

WARD & BARDSLEY LTD.—Regd. April 21, 1961. 3 Clwyd-st., Rhyl. Sec.: C. D. Ward. Bldrs. and contrs., etc. Nom. cap.: £5,000.

B. HODGETTS & SON LTD.—Regd. April 21, 1961. Coventry-rd., Birmingham, 26. Sec.: Margaret M. Hodgetts. Bldrs. and decrs., etc. Nom. cap.: £2,000.

CHERWELL CONSTRUCTION LTD. — Regd. April 21, 1961. 14 Station-rd., Witney, Oxon. Sec.: Diana Strong. Pblc. wks. contrs., bldrs., etc. Nom. cap.: £1,500.

M. J. CLARK BUILDERS DECORATORS LTD.—Regd. April 21, 1961. 80 St. Andrews-rd., Burgess Hill, Sussex. Sec.: Pamela E. Clark. Nom. cap.: £100.

PLANNING & STRUCTURAL SERVICES LTD.—Regd. April 25, 1961. Sec.: James P. Davisson. Advisers, consultants and agents in the fields of bldg., structural work, etc. Nom. cap.: £1,000. Sub.: James P. Davisson, 76a Fenchurch-st., EC3.

Dutch Builders Study Apprenticeships

Discussion at the LMBA

AN INTERESTING exchange of views took place at the LMBA headquarters on April 21 between employer and operative representatives of the Stitchting Vakopleiding Bouwbedrifj—the Dutch Foundation for Technical Education in the Building Industry—and the officers of the London Regional Joint Apprenticeship Committee. The Dutch visitors were finishing a short tour in England, and were most keen to discuss the pilot scheme of the LRJAC on block release study for apprentices. MR. R. A. WOOD, chairman of the LRJAC, and MR. E. L. JONES, the Operatives' secretary, explained the whole scheme from its inception, and then answered questions.

MR. LAMAN TRIP, the Director of the Dutch Foundation, who acted as interpreter, mentioned that block release was unknown in Holland, and, in fact, employers there were not at all happy at the recent commencement of day and half-day release for the training of apprentices, in addition to the usual evening classes. The majority of boys in Holland attended a technical school from the age of eleven upwards, and the apprenticeship period was from age 15 to 23. Therefore, although the Dutch representatives felt block release was probably a more thorough form of training, and better for the apprentices themselves, they felt it would be many years before they could endeavour to introduce such a scheme in Holland.

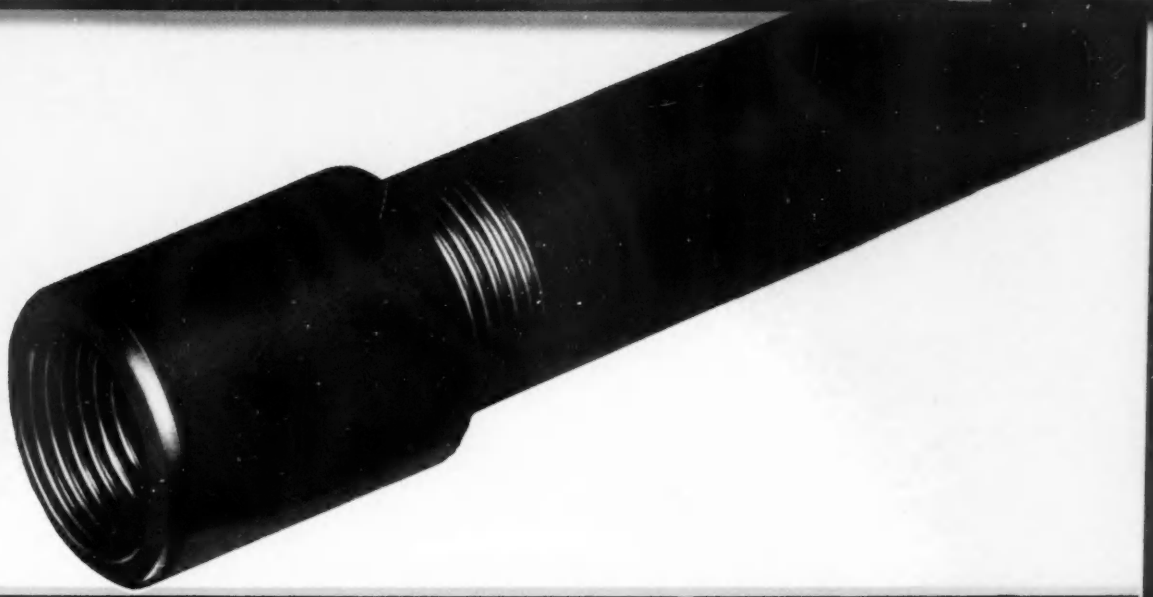
Another interesting factor which arose from the general discussion was that in Holland apprentices have to take detailed examinations at the end of their apprenticeship. For the past few years apprentices had been building a youth hostel as part of their practical examination, as it was generaly felt that lasting work was more useful than test pieces which were afterwards thrown away.

Loans to Local Authorities

Ministry of Housing Allocations

FOLLOWING are details of loans sanctioned by the Minister of Housing and Local Government on behalf of his own Department to local authorities in England and Wales during the quarter ended March 31 last:

	£	£
Housing (land, dwellings, roads, sewers, etc.) ...	74,146,082	
Advances and grants under Housing and S.D.A. Acts	33,599,843	
		107,745,925
Town and country planning	2,720,161	
		2,720,161
Sewerage and sewage disposal	12,923,171	
Water supplies...	8,173,049	
		21,096,220
Burial grounds and cemeteries	105,743	
Coast protection	136,150	
Crematoria	49,673	
General depots	550,250	
General markets	31,550	
Land for the benefit, etc., of the district	840,124	
Physical training and recreation	504,643	
Private street works	601,731	
Privy conversion	49,425	
Public baths and washhouses	337,806	
Public conveniences	164,178	
Public libraries and museums	424,052	
Public walks and pleasure grounds	653,413	
Refuse collection and disposal	285,080	
Street cleansing	13,293	
Town halls and offices ...	1,114,545	
Miscellaneous	931,331	
		6,792,987
		138,355,293



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orders placed in July and onwards—

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News in Brief

Employment in Building

ACCORDING to Ministry of Labour statistics the number in civil employment during March is estimated to have increased by 15,000 to 23,710,000. The greatest increase was of 18,000 in the construction industries, which, at 1,584,000, was 54,000 more than in the same period in 1960.

The Late Mr. Philip S. Allam

THE DEATH occurred on April 29 of Mr. Philip S. Allam, BSc, a son of the founder and a director of E. P. Allam & Co. Ltd. and Associated Companies.

Rubber and Plastic Belting Makers

AT THE ANNUAL GENERAL MEETING of the British Rubber and Plastic Belting Manufacturers' Association, held in London on May 3, Mr. David D. Marshall of the Greengate & Irwell Rubber Co. Ltd. was re-elected chairman for 1961-62.

Rubber Flooring Manufacturers

AT THE ANNUAL GENERAL MEETING of the British Rubber Flooring Manufacturers' Association, held in London on May 3 Mr. T. Thirley (Runnymede Rubber Co. Ltd.) was elected chairman for the year 1961-62. Mr. A. M. Carr (Semtex Ltd.) was elected vice-chairman.

Rubber and Allied Manufacturers

AT THE ANNUAL GENERAL MEETING of the British Rubber and Resin Adhesive Manufacturers' Association, held at Stanlow, Cheshire, on April 25, Mr. N. G. Bassett Smith (Dunlop Rubber Co. Ltd.) was elected chairman, and Dr. H. Simon (Evode Ltd.), vice-chairman, for the 1961-62 session.

Wrapped Rubber Hose Manufacturers

AT THE ANNUAL GENERAL MEETING of the British Wrapped Rubber Hose Manufacturers' Association held in London on May 4, Mr. H. H. H. Helby (North British Rubber Co. Ltd.), was elected chairman for 1961-62. Mr. D. P. G. Moseley (David Moseley & Sons Ltd.) was elected vice-chairman.

Whitefriars Designer to Teach at RCA

MR. GEOFFREY BAXTER, domestic glass designer for James Powell & Sons (Whitefriars) Ltd., of Wealdstone, has been appointed tutor at the industrial glass department of the Royal College of Art for two days a week throughout the summer term. Mr. Baxter will deal with all aspects of modern glass design.

Directory of Research Establishments

THE REVISED DIRECTORY of building research and development organisations, published for the International Council for Building Research, Studies and Documentation (CIB) by Bouwcentrum, Rotterdam, Holland, presents information on European and international organisations, and non-European organisations which are members of CIB. The directory is an excellent facility for the mutual contact between those concerned with the study of building problems.

Take-Over of Medieval Bridge

THE TWELFTH-CENTURY LONG BRIDGE over the Taw Estuary at Barnstaple, Devon, is to be handed over to the Ministry of Transport. One of the last privately-owned bridges in England to be nationalised, its owners, the Barnstaple Long Bridge Charity Trustees, said last week that they had to hand it over for widening and improvements. Left in its present state it could be dangerous. The bridge, which has a carriage-way only 16 ft. wide, is the cause of many traffic jams. The Ministry is to widen it to 24 ft.

Sale of Cambridge Development Site

ONE OF THE last potential development sites of any size left in Cambridge, is coming up for sale. Extending to about 6½ acres, and overlooking the River Cam and Midsummer Common, it is virtually unrestricted land and offers interesting possibilities. The agents, Hampton & Sons (Arlington-street, London, W1) and Douglas L. January, of Cambridge, quote a planning permission for 200 flats in six blocks varying between two and fifteen storeys. A new trunk road is under review which will pass the site, known as the Willows, Cam-road. It is coming up for auction on May 26 unless sold privately in the meantime.

Lancaster Site for University

THE COMMITTEE empowered to choose a site for the recommendation of the University Grants Committee decided on May 2 to accept the offer of the Bailrigg estate at Galgate, near Lancaster. Bailrigg, the home of Mr. John Barton Townley, a motor manufacturer, stands in nearly 200 acres of land. Additional land is also available. Sir Andrew Smith, chairman of the Lancashire County Council, has stated that the mansion attached to the estate could be utilised within the proposed university. If the site was accepted by the grants committee it was hoped that in the next five years the university would open for about 1,000 students, increasing gradually to 5,000. It is understood that the estate will be acquired from Mr. Townley by the Lancaster City Council and made available free to the grants committee.

Personal Column

Messrs. F. R. Hipperson & Son Ltd., building and civil engineering contractors, of Dagenham, announce that SIR JOHN SLEIGHT, BART., has been appointed area director at the company's Oxford office.

Following the amalgamation of the Coventry business of E. O. Shanks & Sons Ltd., timber merchants, joinery manufacturers and general wood workers, with the Austin Hall Group of Companies, MR. WILLIAM ERLE SHANKS has been elected to the Board of the parent company, Austins of East Ham Ltd.

Recruitment of Painter Apprentices

Responsibilities of Employers

ADDRESSING the annual general meeting of the Federation of Painting Contractors at the Dorchester Hotel, London, W, on May 8, the president, MR. G. GREENOUGH, referred to the tendency in recent years of the serious falling off in the number of painters and decorators available to the trade.

'This,' he continued, 'is partly due to a migration of craftsmen from painting to other trades, which are enjoying great prosperity where costs are of little importance, and an unskilled employee is more highly paid than a skilled painter. It is also partly due to a falling off in the number of young men recruited. The ratio of painter apprentices to total labour force is one to nine and is the lowest of any trade in the building industry.'

The industry had some responsibility, the president went on, for ensuring the adequate training of young men, and unless recruitment was given the serious attention it deserved, the jungle warfare adopted by some contractors in offering plus rates, expenses, and other extra payments in order to attract labour would increase until the industry was reduced to chaos.

Concluding with a brief comment about the Chancellor's proposal regarding a payroll tax, Mr. Greenough said that one of the reasons put forward for this proposal was that it was designed to prevent employers from 'hoarding' labour. If this was the purpose, surely the tax was most inadequate, inequitable, and doomed to failure.

BEDA Annual Luncheon

'The Biggest Consumer of Coal'

THE ELECTRICAL INDUSTRY'S biggest customer, the National Coal Board, was represented by its chairman, THE RT. HON. ALFRED ROBENS, at the annual luncheon of the British Electrical Development Association, held at the Savoy Hotel, London, WC, on May 9. Using the maxim that the utmost service to the customer was the most efficient way to help the export potential of manufactured commodities, Mr. Robens proclaimed the necessity of providing industrialists with the cheapest possible source of power. In pursuance of his terms of reference, of course, he advocated that coal was the cheapest source of power. 'It is common sense,' he continued, 'that we should use indigenous products, but we should not regard the electrical industry as a "captured customer".' In the latter respect he mentioned the ascendancy of nuclear power as a major source of the industry's future power.

Mr. Robens said that his future aims were concerned in the main with the maintenance of price stability in the coal industry, and to this end he was pressing forward with the installation of mechanical devices, many of them electrical, at the pithead.

OVERSEAS BUILDING

From Our Own Correspondents

AUSTRALIA (VICTORIA).—In Melbourne, test boring is about to start for the proposed underground railway, the second in Australia. An underground railway system is already operating at Sydney. The Melbourne railway is expected to cost about £A30m. and is hoped to be in operation in 12 years.

AUSTRALIA (WESTERN).—A British and an Australian company in partnership have won a contract worth £A7m. for the design and construction of a big oil processing plant at Kwinana. Messrs. Foster, Wheeler, Ltd., of London, will design the plant, and John Brown Ltd., of Melbourne, will erect it. The refinery is being built for British Petroleum and work on the project is expected to start in September.

CANADA (ALBERTA).—Petrogas Processing Ltd. is to construct a $13m. natural gas plant in the Calgary area. . . . A $35m. newsprint mill is to be constructed at Whitecourt, 100 miles north of Edmonton. . . . The Saratoga Processing Co. has announced an $11m. construction programme for Savannah Creek. . . . The Shell Oil Co. is to construct a $20m. plant at Pincher Creek. . . .The construction expansion programme, to cost $20m., has been approved for Calgary Airport. . . . A new civic building is to be constructed at Calgary at a cost of $2.75m. . . . Western Rolling Mills Ltd. has purchased a 42-acre site near Calgary for the construction of a steel mill. . . . A 1961 construction programme, totalling $3.5m., has been announced by Canadian Utilities. . . . Construction announced for the City of Edmonton includes: a $2m. fibreglass insulation plant; a $4.5m. expansion to the Inland Cement Company's plant; a strip rolling mill for Sherritt Gordon Mines Ltd.; a new Continental Can Co. plant; a new plant for the Pepsi-Cola Co.; an addition to the Marblex Co. plant; and new plants for the Northwest Brewery Ltd. and the Bridge and Tank Western Co.

CANADA (BRITISH COLUMBIA).—The University of British Columbia is to construct a $1.3m. dormitory for students. . . . A 25,000 sq. ft. winery is to be constructed at Port Moody. . . . Tenders are to be called for the 100-room Ramanda Hotel at Vancouver, and for the new laboratory and laundry buildings at St. Paul's Hospital at Vancouver. The latter project cost is estimated at $1.5m.

CANADA (MANITOBA).—The Commonwealth Construction Co. has been awarded the contract for the construction of the $8.9m. terminal building at Winnipeg Airport. . . . Labatts Brewery has announced an $8m. construction programme for Winnipeg. . . . Catelli Foods Ltd. is to build a $1m. plant at Transcona. . . . . Tenders are to be called shortly for the construction of an office building at the Canadian National Railway $25m. new freight yard project at Symington. . . . Construction of a $4m. administration building, for the Bell Telephone Co., has been announced for Winnipeg. . . . A $1.5m. building is to be constructed in Winnipeg for an insurance company, and a six-storey building for the Canadian Wheat Board.

CANADIAN OFFICE BUILDING.—*The newly completed head office building constructed by Taylor Woodrow (Canada) Ltd., for the Ford Motor Company of Canada. The $5m. building, designed by Messrs. Allward and Gouinlock, architects, of Toronto, is sited next to the Ford plant between Toronto and Hamilton, Ontario. It is a single seven-storey structure with a structural steel framework having concrete walls and foundations up to first floor level. Externally a grid effect is given to the fenestration by a series of vertical aluminium fins. Windows are aluminium-framed and infilling panels are insulated porcelain-enamelled. The west elevation has a sawtooth design of alternate porcelain panels and glass to offset direct glare from the sun. Air-conditioning has been installed throughout. The consulting mechanical engineers were R. P. Allsopp Associates Ltd.*

CANADA (ONTARIO). — Robertsteel Ltd. has purchased 19 acres at Burlington on which to construct a new plant. . . . The Shell Oil Co. is to construct a $25m. refinery at Trafalgar Township. . . . Hamilton Warehouse Ltd. is to construct a new factory at Hamilton. . . . The Mixed Concrete Supply Co. is to construct an addition to their plant at Hamilton. . . . British American Oil Co. is to spend $10.35m. on the first stage of a construction programme to aid Ottawa University. . . . A $4.2m. plant is to be constructed at Drydon for the Anglo-Canadian Pulp and Paper Mills Ltd.

CANADA (QUEBEC).—A 21-unit shopping centre is to be constructed at St. Hyacinthe. Estimated cost is $1.5m.

CANADA (SASKATCHEWAN).—The University of Saskatchewan is to spend $3m. on the construction of an expansion for Regina College. . . . Molson's Brewery is to add a $1m. extension to its brewery at Regina. . . . A Head Office building, for Saskatchewan Power Corporation, is to be constructed at Regina. . . . Agra Vegetable Oils Ltd. is to construct a $1.7m. plant at Saskatoon.

HONG KONG.—A long-term outline development plan for the Sha Tin Valley, Hong Kong, envisages the eventual growth of a new suburban residential township for an estimated 360,000 people. The area affected by the Town Planning Board's proposals, which require the approval of the Governor-in-Council before the outline development plan can be implemented, covers some 14,300 acres of mainly agricultural and forestry land and includes the whole of the Valley and Tide Cove. The plan takes in Sha Tin New Town as well as a number of villages and hamlets sprawling from the northern slopes of Lion Rock and Beacon Hill to the village of Cheung Shue Tan, on the west, and to the mining area of Ma On Shan, on the east. The Town Planning Board's proposals provide for certain areas to be set aside for specific uses, some mainly for residential building and others chiefly for industrial or commercial use, while there are reserves for Government and community purposes, such as parks, woodlands, recreation grounds and open spaces. It is not intended that Sha Tin will become an industrial town. The three industrial areas earmarked will provide for service industry and a small amount of manufacturing of a specialist nature, suited to the surroundings.

Overseas Agencies

THOMAS SMITH AND SONS (RODLEY) LTD., the Yorkshire crane and excavator manufacturers who recently announced new overseas agency appointments in Bahrain, Indonesia, Burma, Iran and Morocco, now announce further new appointments, this time in the Middle East and West Africa. Included in these are: SYRIA: The United Syrian Corporation, PO Box 301, Damascus. LIBYA: The Libyan Petroleum Equipment & Supply Co., PO Box 363, Tripoli. JORDAN: T. Gargour et Fils, PO Box 149, Amman. NIGERIA, GHANA and SIERRA LEONE: Represented by the Lagos, Accra and Freetown branches of Glyndova Ltd., of London.

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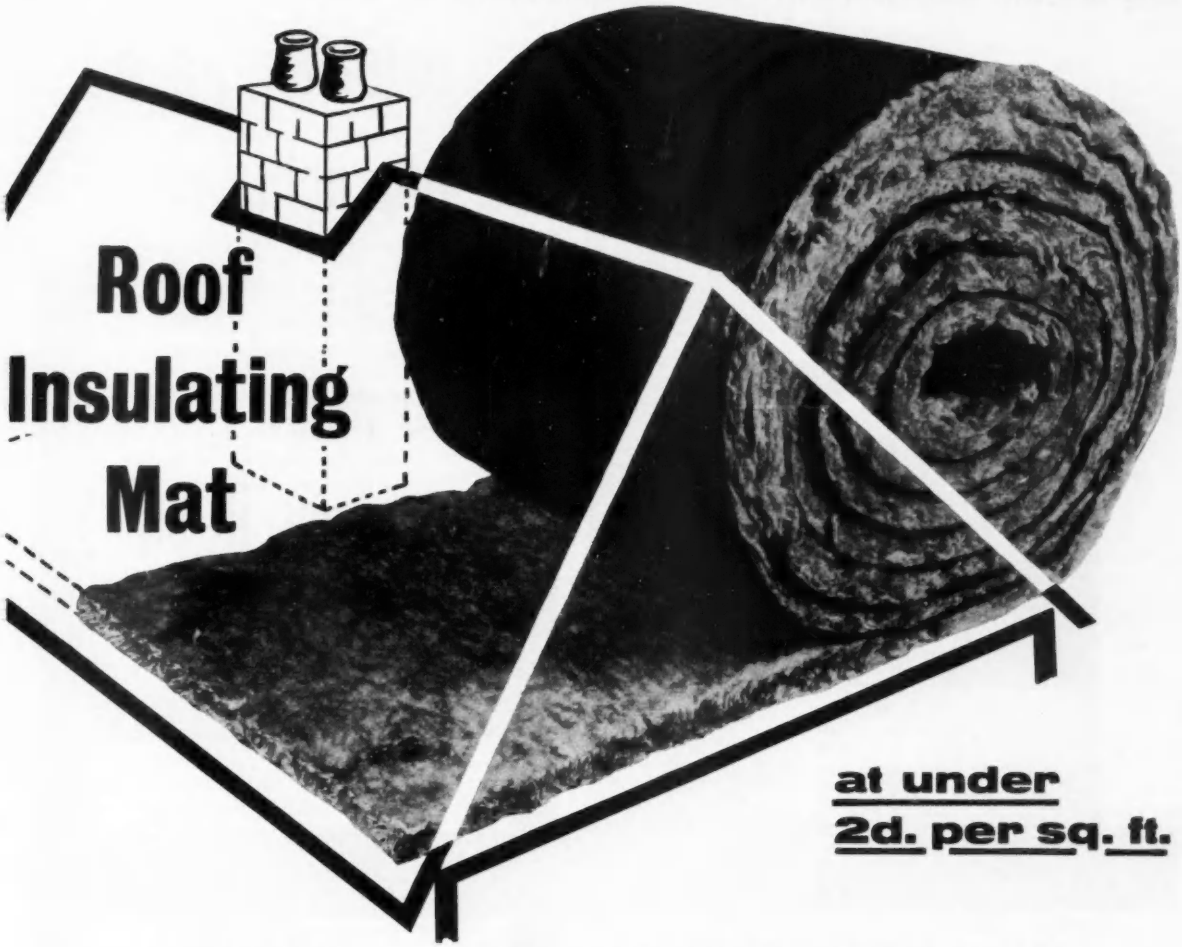

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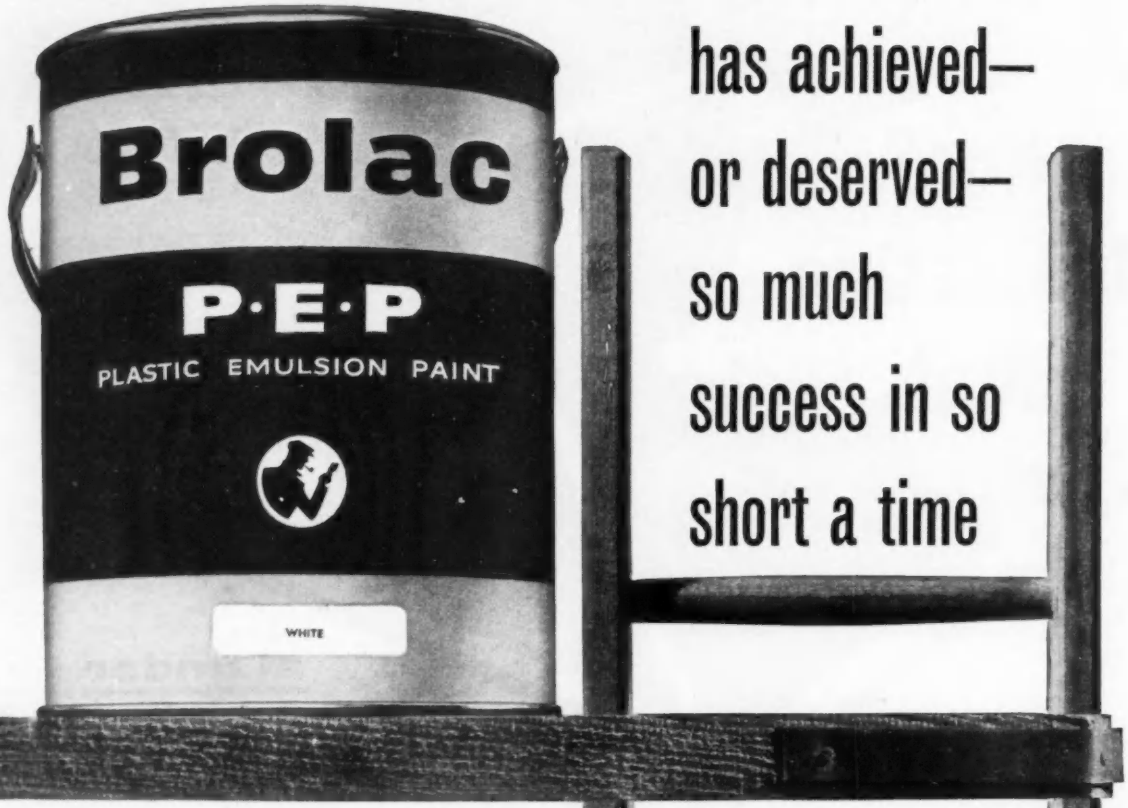

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SCOTTISH BUILDER

£20m. Hospitals Programme

THE GOVERNMENT have approved a hospital building programme worth £20m. It involves the replacement by new buildings of two of three Scottish teaching hospitals —Edinburgh Royal Infirmary and Dundee Royal Infirmary—and the reconstruction of the third, the Western Infirmary, Glasgow, to provide an additional 110 beds.

The Secretary of State for Scotland, Mr. John Maclay, said that he had given authority for the main works of reconstruction at Edinburgh Royal Infirmary and Glasgow Western Infirmary to be planned for building as single-stage operations.

The Glasgow project, it is understood, involves complete rebuilding of the present Western Infirmary. Both there and at Edinburgh the work will be undertaken in one operation, from start to finish.

New Greenock Graving Dock

THIRTEEN FIRMS have been invited to tender for the building of the £4½m. Greenock Graving Dock. The new dock, which will be 1,000 ft. long and 150 ft. wide, will be one of the largest in the world and is the result of many years of co-operation negotiation which resulted in the agreement by a Clyde consortium of engineers, shipbuilders, and marine interests to proceed with the scheme. The sponsors visualise that one of the most important aspects of the dock operation will be the use made by the tankers which at present unload at Finnart. The consulting engineers for the project are Burns-Babtie, a grouping of Messrs. T. F. Burns and Partners, of London, and Messrs. Babtie, Shaw and Morton, of Glasgow.

£22m. Car Factory at Linwood

SITE PREPARATION at Linwood for the new £22m. Rootes factory began on May 2. Construction tenders for the new plant have been invited and the County Council have plans on hand for a £600,000 drainage and sewage scheme. A road plan has also been prepared for the Scottish Home Department showing a dual carriageway past the new factory and rebuilding of a railway bridge.

Canal Site for Edinburgh Road

PROGRESS IS BEING MADE with the plan to utilise the old Union Canal through Edinburgh as the site for a new main road from the centre of the city to the western boundaries. Approval in principle was given in 1957 and the conversion is in the second phase of the Development Plan which is now on the drawing boards. The proposal is that the new road will start at Gardner's-crescent, going out to Craiglockhart and ending at Sighthill. At Slateford, two flyovers are proposed over the Water of Leith. The road will be some 80 ft. wide and although it will not take fast traffic it will relieve the congestion on existing roads. There will be footpaths, the intention being to use the road solely for vehicular traffic. Twelve bridges over or under the canal will require to be dealt with while the problem of water supply to industry is also involved. At present 28m. gallons of water are supplied weekly to industrial concerns and this will become an obligation of the city under the new proposals. It is suggested that instead of the basin being at Freer-street it could be sited some four miles out in the country beyond Sighthill, and that water could be pumped to the industries at present receiving a supply. Cost of the project is estimated at £800,000 plus £200,000 for the pipeline and pumphouse for industrial supply.

Opera House for Edinburgh

RECONSTRUCTION plans for the Royal Lyceum Theatre area in Edinburgh have been indicated by Mr. Myer Oppenheim, chairman of Argyle Securities Ltd., which recently acquired the site. It is to be developed as a festival theatre area. A new opera house is the main feature but the plans also include a restaurant, a festival office, and other facilities. Edinburgh Corporation own much of the land apart from the Lyceum Theatre site and prior agreement would therefore be required on development. Mr. Oppenheim has indicated that a start may be made to the work in about 5 months.

RICS Scottish Branch

MR. DAVID WARDHAUGH, vice-chairman of the Royal Institution of Chartered Surveyors (Scottish Branch) was elected chairman at the annual meeting of the Branch on April 29. The new senior vice-chairman is Mr. J. W. Gray, a partner of Messrs. Baxter, Dunn & Gray, Glasgow.

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Edinburgh College Tender

THE CONTRACT for building the foundations of Napier Technical College, Edinburgh, has been awarded by the education committee of Edinburgh Corporation to James Miller and Partners, Ltd., Edinburgh, whose tender was £36,587. The original estimate for this phase of the scheme, made by the city architect and described recently as 'a broad one,' was £60,000. The estimated cost of the college is £1.5m.

Alterations to Working Rules

AT A MEETING held on April 11 the Scottish National Joint Council for the Building Industry resolved that with effect from May 1 the following new clause should be added to Rule 3: 'Qualified tubular scaffolders employed whole or part time as such should receive 5½d. per hour above the labourers' rate.' To qualify for this payment the operative must satisfy the employer that he has been trained, has been continuously employed in performing this class of work for at least 18 months and can satisfactorily perform the duties of handling, erecting, dismantling, servicing and maintaining tubular scaffolding, including relative tackle and equipment, temporary stands of tubular metal lifting gear and tackle.

The notice of amendment to Rule 3 also states that the clause relating to dirty underfoot conditions is to be amended with effect from May 1 as follows: 'It is competent for a Local Joint Committee to award after inspection that, where there are extraordinary dirty underfoot conditions, operatives affected by these will be paid 2d. per hour.'

New Buildings

ALLOA BURGH.—Cllr. Ronald Grant, a builder and contractor, has been elected Provost of the Burgh.

BO'NESS.—Erection of 22 houses on three small sites at Grahamsdyke-ter., Dean-rd. and Bo'mains-rd. Apply John A. McKittrick, Town Clerk, Council-chbrs., Bo'ness.

BUCKHAVEN & METHIL BURGH.—TC have proposals for a community centre at Savoy Park and they have agreed provisionally that the centre should include a large hall, lesser hall, swimming baths, bowling green and tennis courts.

INVERKEITHING BURGH. — Planning approval has been given to the erection of 58 dwelling houses at Roman-rd. and 13 lock-up garages and the provision of the first stage of a proposed public park, all for the TC.

INVERKEITHING BURGH.—Mr. Colin Morris, a contractor in Central Scotland, has been appointed Provost of the Burgh of Inverkeithing, Fife.

LANARK.—Forty-eight houses and 24 lock-up garages are to be built by the CC at New Stevenston, at a cost of £83,000.

TAYPORT BURGH.—Planning approval has been given to Tayport TC for the erection of 14 four-apt. and 12 three-apt. houses at Banknowe-ave. and Craig-rd. Architect, Peter Sinclair, Methil.

THE BUILDER CONSTRUCTION NEWS

Full details of Public Appointments open will be found in the Advertisement pages of this and previous issues.

CONTRACTS OPEN

For some contracts still open but not included in this list, see previous issues. Those preceded by the symbol (A) are advertised in this number. The latest date for the receipt of tenders or applications appears above each paragraph. The symbol (R) preceding each entry indicates that applications must be received by this date.

BUILDING

MAY 16

(AR) BLACKPOOL CBC.—Detached extension to form three classrooms, cloaks and toilets, at Norbreck sch. Boro' S. Dep. £2.

MAY 18

(AR) BEDFORDSHIRE CC.—Fixed price tenders for proposed new county sec. sch., Toddington. County A.

MAY 22

(AR) LEICS. CC.—Applications invited for inclusion in a selected list of contractors to tender on a firm price basis for extensions to: (a) Burbage Hastings high sch.; (b) Enderby Brockington sec. mod. sch. County A.

MAY 23

(AR) HUNTINGDONSHIRE EC. — Fixed price tenders for erection of two-form entry sec. mod. sch. together with adult provision, youth centre and caretaker's cottage at Sawtry. County A.

(AR) WANDSWORTH MBC.—Erection of new public convenience and small depot at Leigham Court-rd., SW16. Boro' E&S.

(A) WHITSTABLE UDC. — CD rescue vehicle garage. E&S.

MAY 27

(AR) SOUTHAMPTON CBC.—Erection of a pavilion at Stoneham-la. Boro' A. Tenders by June 26.

MAY 29

(A) ALDERSHOT BC. — Applications invited for inclusion on lists of builders, public works and civil engineering contractors for works of varying character and value. Boro' E&S.

(AR) CANNOCK UDC.—Fixed price tenders for: (a) Eight flats at Hednesford-rd., Pye Green; (b) four flats and two garages at Moss-st., Chadsmoor; (c) 14 dwellings, 12 garages and one lock-up shop at Bevan Lee-rd., Cannock; (d) 104 dwellings and 37 garages at Belt-rd., Hednesfield. Council's A. Dep. £2 2s. Tenders by June 26.

(A) LEATHERHEAD UDC.—Erection of sewage works manager's house and building containing office, laboratory and garage. E&S. Dep. £2 2s.

NORTHERN IRELAND MINISTRY OF COMMERCE.—Construction and completion of a factory at Saul-rd., Downpatrick, Co. Down. Ministry of Commerce, Room 30b Chichester-hse., 64 Chichester-st., Belfast. Dep. £3.

(A) SALFORD CITY C.—Firm price tenders for: (a) Proposed two-bay fire station at Bury New-rd., Salford 7; (b) erection of 15 flats at Medway-cl., Salford 5; and (c) 18 flats at Eccles Old-rd., Salford 6. City E&S. Dep. £2 2s. (each contract).

(AR) WATFORD BC.—Erection of 19 bed-sitting room flats and one two-bedroom flat at junction of Hagden-la. and Brightwell-rd. Boro' E&S. Tenders by July 5.

(AR) WEST SUSSEX CC.—Extensions at Worthing College of Further Education (Job No. 6782). County A.

(A) WIDNES BC.—Construction of garages, bases and hardstandings at Kingsway estate. Boro' A.

MAY 31

DONEGAL (Eire) CC.—Erection of fire station and residence at Letterkenny. County Secretary, County-hse., Lifford, Co. Donegal. Dep. £5 5s.

(A) GRAVESEND BC.—Improvements to 610 houses on three estates. Boro' E&S.

JUNE 1

(A) BOOTLE CBC.—Erection of two blocks of three shops with five maisonettes over, two four-storey blocks of 12 maisonettes and 27 garages, at Park-la., Netherton. Boro' S.

JUNE 2

(A) BECKENHAM BC.—Fixed price tenders for 26 garages, etc., at Bromley-rd. housing estate. Boro' E. Dep. £2.

JUNE 5

(A) ABERYSTWYTH BC.—Erection of two blocks of 16 garages at Fifth-ave., Penparcau. Boro' S & Water E. Dep. £1 1s.

(A) COULSDEN & PURLEY UDC.—Erection of library at Old Coulsden. Clerk of Council. Dep. £3 3s.

(A) HARPENDEN UDC.—Erection of staff houses at Westfield Cemetery and Piggotts-hill-la. sewage works. E&S. Dep. £2 2s.

(A) WALSALL CBC.—Separate fixed price tenders for 74 houses and six bungalows at Darlaston-rd. allotment site and 12 houses at Mulberry-pl., Bloxwich. Boro' E&S. Dep. £2 2s.

(A) WHITSTABLE UDC.—Conversion of 'Steam Packet,' Harbour-st., into offices and flat. E&S.

JUNE 6

(A) WALLASEY CBC.—Sports pavilion at Lingham Park, Moreton. Boro' A.

JUNE 7

(A) SOUTHEND-ON-SEA CBC.—Conversion of classroom into partially deaf unit at Prince-ave. infants' sch. Boro' A.

(A) SOUTHEND-ON-SEA CB. — Conversion of practical rooms into laboratories at Southend high sch. for boys. Boro' A.

JUNE 13

(A) WEST RIDING OF YORKSHIRE CC. —Re-organisation and extensions to Dearnside sec. sch./Mexborough gram. sch./Owston Park sec. sch. Divisional A.

JUNE 14

(A) LINDSEY CC.— Phase 2 of Beretun sec. mod. sch., Barton-on-Humber. County A.

NO DATE

(A) ABERGAVENNY RDC.—Separate lump sum tenders for: (a) small water scheme, Llanwenarth Citra; (b) eight houses, Mardy bungalows site; (c) four houses with small sewage disposal works, Llanddewi Skirrid; (d) four houses with small sewage disposal works, Gt. Oak housing estate, Bryngwyn; (e) site works, roads and sewers, Lower House site, Govilon; (f) four houses, Llanvapley. A&S.

(A) BUCKS. CC.—General building work (17 contracts). County A. Dep. £3 3s.

(A) CHISLEHURST & SIDCUP UDC.—Public conveniences, Sidcup. E&S. Dep. £2 2s.

(A) YORK CITY C.—Inclusion in selected list of approved building contractors. City A.

SERVICES, PAINTING, MATERIALS, ETC.

MAY 19

(AR) SCUNTHORPE BC. — Inclusion in list of contractors for heating and ventilation work to public swimming baths, Doncaster-rd. Boro' S.

MAY 20

(AR) ESSEX CC.—Firm price tenders for external and internal decorations to various schools (four contracts). County A. (separate contracts).

MAY 23

(AR) BOURNEMOUTH CBC.—Installation of heating boilers, etc. at St. Michael's sch. Boro' A.

(AR) WATFORD BC.—Retiling of roofs of 40 houses. Boro' E&S. Dep. £2 2s.

MAY 24

(AR) DURHAM CC.—Renewal of floors at Hebburn county sch. County A.

MAY 26

(A) MIDDLESBROUGH CBC.—Supply of materials, etc. Boro' E.

(A) ROMFORD BC.—Supply and erection of roller skating pavilion at King George's Playing Field. Boro' ES. Dep. £2 2s.

MAY 31

(A) BATH CITY C.—Electrical installation at Nos. 3, 4 and 5 North Parade-bldgs., Bath. S of Corporate Property. Dep. £2 2s.

(AR) READING CBC.—Firm price tenders for: (a) erection of a steel-framed building at the Highways Depot, Abattoirs-rd., Reading, and (b) the provision of concrete foundations, site concrete and dwarf walls, etc., in connection with above. Boro' A.

JUNE 2

(A) LUTON BC.—Fixed price tenders for electrical re-wiring of 281 'BISF' type houses at Ashcroft estate. Boro' A.

JUNE 5

(A) FRIERN BARNET UDC.—Cleaning artificial stonework at Town Hall. E&S.

(A) RICHMOND (Surrey) BC.—External painting and minor repairs to 82 houses and 12 flats in the Ham area. Boro' E&S.

JUNE 12

(A) DEPTFORD BC.—Supply, delivery and erection of: (a) 404 yd. run of 2- and 6-in. galvanised mild steel hurdle railings and gates at St. Paul's Churchyard, SE8, and (b) 76 galvanised railed panels to play areas at Clyde-st. flats, SE8. Boro' E.

(A) GUNNERBURY PARK JOINT COM. —External painting of large mansion. Boro' E. Clerk & Superintendent.

JUNE 13

(A) HARROW BC.—Erection of fences, etc., at Weald Village and Kenton-la. housing estates, Harrow Weald. Boro' E. Dep. £2.

MUNICIPAL AND CIVIL ENGINEERING WORKS, ETC.

MAY 18

BURNLEY CBC.—Surfacing with hot rolled asphalt of approx. 32,500 sq. yd. of carriageways within Borough. Boro' E&S. Dep. £2.

MAY 24

MIDDLESEX CBC.—Supplying and laying of approx. 18,000 sq. yd. of two course 4 in. thick hot rolled asphalt to BS594, at the Western-ave. viaduct, Uxbridge. E&S. Dep. £2 2s.

MAY 26

WORTLEY RDC.—Surface dressing of approx. 115,000 sq. yd. of road. E&S.

MAY 31

ST. NEOTS RDC.—Construction of reinforced concrete water tower, capacity 75,000 gallons, height approx. 60 ft., at Perry, nr. Buckden, Huntingdonshire. Pick, Everard, Keay & Gimson, engrs., 6 Millstone-la., Leicester. Dep. £5 5s.

JUNE 6

CHANCTONBURY RDC. — Construction of approx. 3,500 lin. yd. of 6- and 9-in. dia. sewers and rising mains, one sewage pumping station, etc., for main drainage at West Chiltington, Nutbourne and Thakenham. Howard Humphreys & Sons, West-st., Epsom, Surrey. Dep. £5 5s.

JUNE 13

RAMSGATE BC.—Construction of approx. 13,124 lin. yd. of 6- to 24-in. dia. surface water and foul water sewers, with house connections, manholes, gullies, two 36-in. dia. foreshore outfalls, sewage pumping building, and 12-in. dia. spun-iron rising main, for Cliffsend and Manston drainage scheme. Boro' E&S. Dep. £5 5s.

GENERAL BUILDING WORK (LONDON)

CHELSEA.—Luxury Flats.—Planning permission has been granted to Park Investments Ltd., of 98 Park-la., W1, for the erection of an 8-storey block of luxury flats, together with ground-floor showrooms and a basement car park at Drayton-gdns., Chelsea, SW10. The scheme has been designed by Richard Seifert & Partners, architects, 34 Red Lion-sq., WC1. Each flat will be centrally heated and will consist of three bedrooms, two bathrooms and separate cloakroom and toilet, a kitchen and a large living room with dining recess, and will cover an area of approximately 1,269 sq. ft. net. A feature of the new block will be that each flat will have its own sun balcony, which is to be finished in

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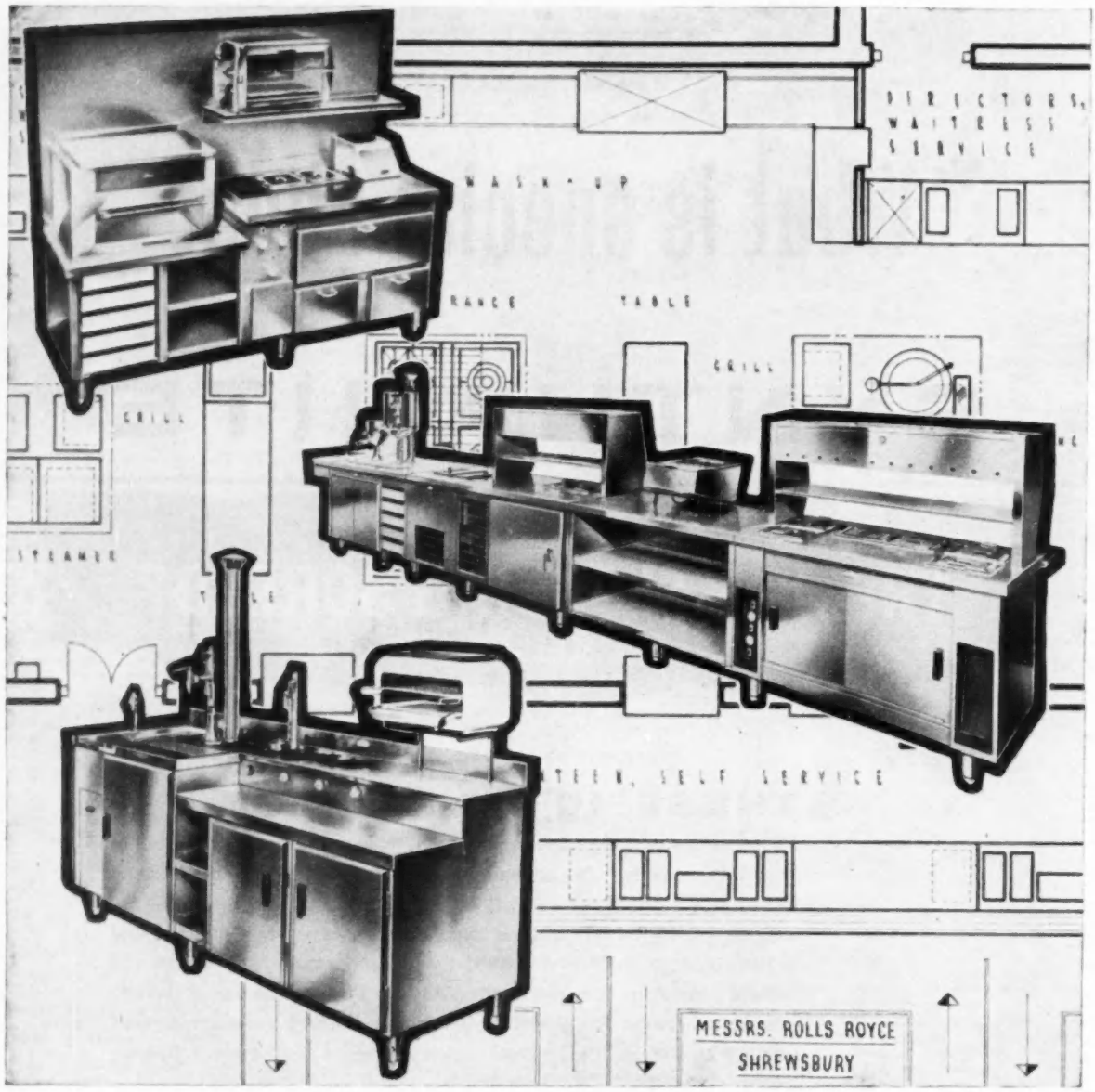

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FELTHAM.—£1m. Depot Scheme.—Mr. Ronald Lyon, an industrial builder, has completed negotiations for a 13½-acre site alongside London Airport for a purchase price of £276,500. The site, which at present comprises an old Victorian house in its own grounds, will be used for a £1,000,000 warehouse and storage depot. The sum of £276,500 is probably a record price for a site for this type of development. His company, Ronald Lyon Estates Co. Ltd., Auckland House, New Zealand-ave., Walton-on-Thames, will use the site to build warehouse premises in the London area. It has been acquired from Feltham Urban District Council, and because of its position many enquiries have already been received from prospective tenants. Situated in Faggs-rd., Hatton Cross, the building will be restricted to a height of 40 ft. at one end to clear aircraft take-off and landing approach. Offices in the building will be insulated against aircraft noise.

HACKNEY.—Housing Schemes, Final Estimates.—Loan sanction of the Ministry of Housing and Local Government for the building works for the Bakers Hill scheme amounts to £58,130, for the construction of 18 dwellings. Of this sum £8,000 is for estimated site cost.

LEWISHAM. — Site for Old People's Home.—The LCC Ed. Committee has agreed in principle that a site of just over an acre, which is surplus to education requirements, in Boundfield-rd., adjoining Forster Park prim. sch., Lewisham South, shall be appropriated to welfare purposes and have approved a scheme for the erection of a home for 91 old people on the site. The estimated cost of the work is £124,640, including £6,120 for abnormal foundation and site works and £850 for the lay-out of the grounds. The estimated cost of furniture and equipment is £15,015, making an estimated total capital cost of £139,655.

(PROVINCIAL)

ACCRINGTON.—The Goodacre Development Corpn. propose erection of supermarket and 12 two-storey shops at Union-st.

ALDERSHOT.—BC propose erection of ten houses for sale at Mount Pleasant-rd. and 250 houses adjoining Heathcote Memorial prim. sch. . . . Miss Evelyn Blake proposes erection of three-storey block of flats at Eggars Hill. Inquiry held.

ALTON (Hants).—UDC to build 92 houses at Manor estate, est. £134,072.

ANDOVER.—Diocesan Authorities have accepted plans for the building of new parish church for St. Michael & All Angels, Weyhill-rd., Andover, est. £25,000. The architect is Mr. Roger Pinkney.

BASINGSTOKE. — Included in 1960-61 major building programme, is the enlargement of the new South Ham sec. sch., est. cost £236,000.

BEDS.—Shell Mex and BP Ltd. propose petrol filling stations at South Downs and North Downs. Architects, Max Lock & Ptnrs., 109 Great Russell-st., London, WC1.

BELFAST.—Two new fire stations at Fortwilliam and in the Belmont-Knock area, are suggested in a long-term modernisation and development programme for the fire service.

BERWICK.—Northumberland CC to build prim. sch. at Falstone. County A is C. C. Brown, 30 Great North-rd., Newcastle-on-Tyne.

BINGLEY.—UDC propose erection of 36 flats at Main-st. Est. £63,000.

BLACKBURN.—Mervyn Williams & Sons Ltd., Nuneaton, propose residential development at Mill Hill. . . . Salford RC Diocesan Trustees propose erection of new church hall/presbytery at North-rd.

BRIDGNORTH.—Salop EC propose major extensions at Bridgnorth Boys' mod. sch., £105,825 est.

BURNLEY.—Massey's Burnley Brewery Ltd. propose modernising the Baltic Fleet Inn.

BURY.—RC Authorities propose prim. sch., St. Joseph's.

CAMBERLEY.—Surrey EC propose alterations at Wishmore Cross Residential special sch.

CARSHALTON. — Surrey CC propose prim. sch. at Farm-rd.

CATERHAM AND WARLINGHAM.—Plans submitted to UDC: 16 dwellings off Burntwood-la.; extensions to Chaldon CoE prim. sch., Rock-la., Chaldon.

CHEADLE HULME. — Henry Davies Developments Ltd. proposes redevelopment of five acres land off Ladybridge-rd.

CHESTERFIELD.—BC propose phase I of new Chesterfield sch.

CHIPPENHAM.—BC propose 20 flats, warden's flat, communal room and guests' room at Factory-la.

CROWTHORNE.—Ministry of Works is to build at a site near Crowthorne for the Radio Research Station of the Department of Scientific and Industrial Research, a fully steerable radio-telescope, est. £250,000, including buildings, equipment and site services.

DARLINGTON.—Sketch plans have been prepared for psychiatric unit at Darlington Memorial Hospital for Newcastle Hospital Bd. Bd.'s Chief A is P. H. Knighton.

DARWEN.—ICI Ltd. propose extensions to Britannia Mill at £200,000.

DENBIGHS.—CC propose major developments to Denbighs technical college, Wrexham, during 1961-63.

DERBY.—Congregational Authorities propose block of shops with church over, after demolition of existing church, Victoria-st.

DEVIZES.—RDC propose to build 110 houses during next five years.

DEWSBURY.—BC propose hostel for mentally handicapped at Syke-la.

DURHAM.—North-Eastern Housing Association Ltd., Windsor-terr., Newcastle-on-Tyne, to erect 100 houses at Newton Hall estate.

DURHAM.—E. Pye & Sons, builders and contractors, East Parade, Bishop Auckland to erect houses at Brancepeth Castle.

EASINGTON (Co. Durham).—RDC is considering erection of 72 houses at Kings-rd. Surveyor is R. R. Lumsden.

EATON.—RDC propose erection of 54 houses for sale at Hazell-way and Vine-rd., Stoke Poges.

ECCLES.—BC propose erection of ESN sch. during 1961-62.

FARNHAM.—Dzus Fastener (Europe) Ltd. propose extensions to factory at Guildford-rd. factory estate. Architects: Fuller, Hall & Houlsham, 212 High Holborn, London, WC1.

GATESHEAD.—G. H. Gray and Ptnr., Portland-terr., Newcastle-on-Tyne, are architects for pattern storage building at Earlsway, Team Valley estate, for Sigmund Pumps Ltd. . . . Scottish Brewers Ltd., City-rd., Newcastle-on-Tyne, are to erect public house at corner of Ann-st., and High West-st. The architects are Arthur & Kirkup, 13 Swinburne-st., Gateshead. . . . M. Brady Ltd., builders and contractors, Broadwood-rd., Newcastle-on-Tyne, are to erect 24 flats at Hillside, Saltwell-rd.

GATESHEAD.—TC has accepted plans by Millerdale Properties Ltd., 45 Dean-st., Newcastle-on-Tyne, for the development of a shopping centre on a five-acre site bounded by High-st./Jackson-st./West-st./Ellison-st., Gateshead. More than 50 shops are planned, and the scheme is estimated to cost £1m. Millerdale Properties are working in conjunction with the E. Alec Coleman Group of Companies, London, SW7. Architect is H. O. Ludor. It is hoped to commence work on the project later this year, and complete it within two years.

GUILDFORD.—Plans submitted to TC: 20 flats at 'St. Mildreds' and at 120 London-rd.; development of land for residential use off Merrow-st., Merrow Common; six shops with accommodation over at Pannell's-ct.

HAYES.—London Diocesan Board of Education propose rebuilding Doctor Tripletts CoE sch., £50,000 est. Architect, Charles Pike, 14 Lincoln's Inn Fields, London.

HECKMONDWIKE.—Yorkshire Woollen Dist. Transport Co. Ltd. propose bus garages/offices, Swallow-st.

HIGH WYCOMBE.—BC propose erection of eight aged persons' dwellings at the Castlefields Estate and 21 at Barry Lodge.

HYTHE (Hants.).—SW Hants Area Planning Com. recommends approval for revised plans for proposed erection of 12 shops with maisonettes over, four houses, 32 flats and 34 lock-up garages at Langdown Lawn estate, Hythe.

KINGSTON-ON-THAMES. — Surrey CC propose erection of new Courts of Justice on the Bittoms, £200,000 est. cost.

KINGSTON-ON-THAMES.—South West Regional Hospital Bd. propose new kitchens and dining rooms at Kingston Hospital. . . . G. T. Crouch Ltd. propose extensions to offices at Southerland-hse., Surbiton-cres. . . . B. Draper & Sons Ltd. propose demolition of existing premises and erection of warehouse and office block at Kingston Hall-rd.

LANCASTER.—Following for Lancs. EC: Adaptations to girls' gram. sch.; hostel for 50 students at Lancaster & Morecambe College of Arts & Crafts.

LEATHERHEAD.—UDC propose erection of houses on the Allotment site south of the by-pass.

LIVERPOOL.—Development Committee, University of Liverpool, propose major developments during 1962-65, £4m. est. . . . Robertson, Buckley & Co. Ltd. propose erection of 3-storey depot, Juniper-st. . . . Lord

Contracts Placed

We are glad to receive from architects and quantity surveyors for publication details of contracts placed to the value of £20,000 or over. Such information should reach the Editor as soon as possible after the contract is signed. Names of the architect and other consultants associated should be given.

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St. Investments Ltd. propose erection of 16-storey block flats/restaurant, St. John's Lane, £1m. est. . . . The Liverpool Borax Co. Ltd. propose erection of 4-storey office block, St. Paul's-sq.

LIVERPOOL.—TC propose erection of teaching accommodation at C. F. Mott Training College.

LLANDRILLO-YN-RHOS.—Denbighs. CC propose erection of new Technical College. Est. £300,000.

LONDONDERRY.—Co. EC have approved Kilrea as the site of the Kilrea-Garvagh RC voluntary intermediate sch. to accommodate 200 pupils. Est. £621,340.

LUTON.—The South of England Hat Manufacturers Federation propose erection of factory.

LUTON.—Lyon (Estates) Ltd., Hersham, Surrey, propose erection of factory, warehouse and offices at Skimpot-la. Architects: Ventris & Waple, Auckland-hse., New Zealand-ave., Walton-on-Thames. . . . R. Ward (Luton) Ltd. propose erection of 34 maisonettes and garages between Moreton-rd. and Turners-rd. . . . Pearce & Barker Ltd., Luton, propose erection of 31 houses at Hitchin-rd. . . . G. C. Sell, Luton, proposes erection of ten houses, 30 flats and 34 garages at Crescent-rise extension.

MAIDENHEAD.—Land and House Property Corporation, London, propose shops and offices in front of the Ritz Theatre.

MANCHESTER. — Hennan Beddow & Sturmey Ltd. propose erection of 11-storey car park, after demolition of existing property, London-rd. . . . Cantors Ltd. propose erection of shops, Oldham-st. . . . City Centre & District Properties Ltd. propose erection of 12-storey office block, Marsden-st./Pall Mall. . . . Land Revenue Trust Ltd. propose erection of office block, Quay-st. . . . Liver Galvanising Co. (Manchester) Ltd. propose extensions to works, Bower-st. . . . Nathan Brown Estates propose erection of luxury flats, Platt-la./Wilmslow-rd. . . . British Cotton, Silk & Man-made Fibres Research Ass. propose extensions, Shirley Institute, Didsbury, £400,000 est.

MATLOCK.—UDC propose erection of aged persons' bungalows/36 flats adjoining drill hall. . . . S. & E. Johnson Ltd. propose 4-storey extension, Flour Mill, Old-rd., Darley Dale.

NEWCASTLE-ON-TYNE.—CC to spend £485,000 on erection of central library; considering erection of civic theatre; considering £½m. scheme for construction of a sports stadium on the site of the Ouseburn tip. . . . The Norwich Union Insurance Societies Ltd., Norwich, are to erect multi-storey office block at Westgate-rd. Outline plans approved. . . . M. Grady, Ltd., builders, 74 Broadwood-rd., to erect three blocks of 2-storey flats at Waterworks-rd.

NOTTINGHAM.—Shell-Mex & BP Ltd. propose erection of petrol filling station at Piccadilly, Bulwell. . . . TC propose erection of infants' sch. at Glade Hill. Est. £50,338.

OSWALDTWISTLE.—UDC propose 158 dwellings at Thwaites-rd.

PENISTONE.—UDC propose erection of 60 dwellings during 1961-62.

PETERSFIELD (Hants).—UDC recommend permission be granted to G. J. Sell for building 44 houses and garages on land off Tilmore-gdns.

PETERSFIELD.—RDC propose office block adjoining Council Offices.

POYNTON.—Macclesfield RDC considering use of two-acre site as civic centre.

PYRFORD.—PC Council propose erection of a new church of St. Nicholas, £45,000 est. Architect, Mr. David Nye, Bramley.

READING.—Gillette Safety Razor Co. Ltd. propose erection of light industrial building at Basingstoke-rd. Architects: Dodge & Reid, 72 High-st., Brentford.

ROCHDALE.—BC propose erection of new Matthew Moss sec. sch.

ROCHDALE.—The Education Committee have submitted projects for five new schools to the Minister of Education for the 1963-65 building programme. They are: Hewarth Cross sec. mod. sch., Halifax Road jun. and infants' sch., St Peter's CoE infants' sch., St Gabriel's RC jun. and infants' sch., and RC Convent sec. sch.

RUNCORN.—Greenall Whitley & Co. Ltd., Chester, propose erection of new licensed premises at junction of Linkway/Grangeway.

ST. ALBANS. — NW Metropolitan Regional Hospital Bd. proposes nurses' home at City Hospital, £42,000 est. Architects: Tasker, Cassidy & Campbell, 12 Montague-pl., London, W1.

SALFORD.—Governors of Royal Technical College propose erection of new Halls of Residence at Oaklands site. Est. £594,521.

SALFORD.—TC propose 17-storey block flats at New Church site.

SEAHAM.—Further coast protection works costing £86,000 are proposed by UDC and tenders are to be invited.

SEATON VALLEY.—M. J. Liddell & Son, builders and contractors, 36 Gt. North-rd., Newcastle-on-Tyne, are to erect filling and service station at Park-la., Shiremoor. Architects are Waring & Netts, 36 Jesmond-rd., Newcastle-on-Tyne.

SHEFFIELD.—Joshua Tetley & Son Ltd. propose erection of new licensed premises at Fraser-rd.

SHEFFIELD.—Robt. Neill & Co. (Sheffield) Ltd. propose offices/warehouse, Scotland-st.

SKELMERSDALE. — Tootles Tours Ltd. propose petrol station, Liverpool-rd.

SOUTH SHIELDS.—Plans being prepared by Marshall & Tweedy, 36 Blackett-st., Newcastle-on-Tyne, for the erection of three-storey shop premises in Ocean-rd. for London and Northern Properties Ltd., 5 Benton-terr., Newcastle-on-Tyne.

SOUTHPORT.—Following for BC: Seek site for infant welfare centre at Ainsdale district; 28 old peoples' flatlets at Birkdale; new lairages for abattoir.

STOCKPORT. — The Church Commissioners propose residential development at six-acre site at Hawfield-gdns. . . . Following for BC: Min. approval received for erection of new ambulance depot at Heaton-la., £34,624 est.; erection of two 11-storey blocks flats/34 garages/16 old peoples' flats at Victoria Park, £385,000 est.

STOCKTON-ON-TEES. — George Wimpey & Co. Ltd., Orchard House, Fenwick-terr., Newcastle-on-Tyne, have acquired 46 acres of land at Hartburn for housing and shopping developments.

SUNDERLAND.—The Corpn. Parks Com. are submitting to TC a £180,000 scheme for a new 37 acres extension to Barnes Park. The work includes £110,000 for a boating lake, £20,000 for roads and paths, and £8,000 for pavilion, boathouse and park-keeper's house. Boro' E is T. Donkin. . . . TC is expecting Government grant of £339,000 towards the construction of the first section of a new inner ring road between Wearmouth Bridge and High-st. west.

SUNDERLAND.—Further factory additions proposed for Ericsson Telephones Ltd. The work will be carried out under the authority of North-Eastern Trading Estates Ltd., Gateshead. The architects are Newrick & Blackbell, 58 John-st., Sunderland.

SUTTON (Surrey).—South West Metropolitan Regional Hospital Bd. propose occupational therapy unit at Belmont Hospital. Architects: Hammett & Norton, 29 Sackville-st., London, W1.

TUNYREFALL.—The Industrial Estates Corpn. of Wales propose extensions at Royal Worcester Ceramics Works.

WAKEFIELD.—Trend Developments Ltd. propose shops/offices, Northgate.

WALSALL.—Following for BC: 22 houses/21 bungalows/9 flats, various areas.

WATFORD.—BC approved erection of factories at the Holywell estate.

WATFORD.—RDC approved erection of factory and office at Hill Farm-ave. for M. E. Developments Ltd., Watford.

WEST BROMWICH.—Cranleigh Investments Ltd. propose 3-storey office block, Lombard-st.

WEST RIDING CC.—EC on April 25 decided to submit to the Minister of Education a £94,300 building programme for the county youth service. There are 14 projects in the programme and in addition there are 6 reserve schemes costing more than £45,000. In February the committee sent to the Minister, youth building plans costing £65,000. The new schemes are at Crosshills, South Craven sec. (£6,300); Denholme prim. (£5,500); Boroughbridge sec. (£4,000); Bramhope prim. (£6,000); Otley Weston lane prim. (£10,300); Lepton Church of England controlled (£4,500); West Ardsley prim. (£13,000); Ecclesfield Colley sec. (£10,500); Royston extension of present youth centre (£8,000); Pontefract Carleton prim. (£3,000); Wath sec. (£9,000); Bentley Scawthorpe sec. (£4,000); North and South Anston prim. (£5,100); and Thorne sec. (£5,100). The reserve projects are at Earby county sec. (£6,300); Settle High (not known); Guiseley county sec. (£10,300); Todmorden Scapecliffe county sec. (£5,750); Cudworth county sec. (£9,050); Wombwell Part-street youth centre (£14,000).

WHITEFIELD (Lancs.).—UDC propose 24 old people's dwellings/warden's accommodation/laundry, The Elms estate.

WHITLEY BAY.—Plans approved for 54 houses at Monkseaton estate. The builders are M. J. Liddell & Son, 36 Great North-rd., Newcastle-on-Tyne.

WIGAN.—15 acres of land have been purchased by Lancs. EC for erection of St. Peter's RC sec. sch., Orrell.

WINDLESHAM.—Dowlrank Developments Ltd. propose erection of 24 houses the 'Surrey Cricketers.'

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TENDERS

(A) Denotes *accepted.*
(PA) Denotes *provisionally accepted.*
(RA) Denotes *recommended for acceptance.*
(AM) Denotes *accepted subject to modification.*
(GD) Denotes *accepted subject to approval by appropriate Government Department.*

BASINGSTOKE.—Erection of sec. sch. at South Ham for CC. (A) Mussellwhite & Son Ltd., Basingstoke, £236,000.

BEDLINGTON.—Factory extension for Thermalite Ytong Ltd. (A) John Laing & Son, Norham-hse., New Bridge-st., Newcastle-on-Tyne.

BEDLINGTON.—Shop premises and warehouse at The Square, Guide Post, for Walter Willson Ltd. (A) E. Nixon & Son (Shopfitters) Ltd., 17 Stepney-rd., Newcastle-on-Tyne.

BILLINGHAM-ON-TEES. — Construction

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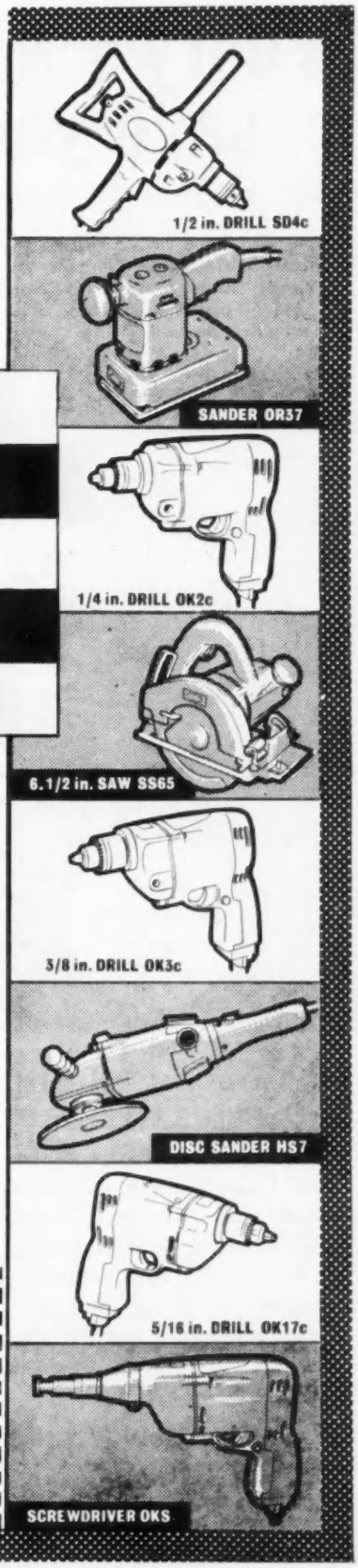

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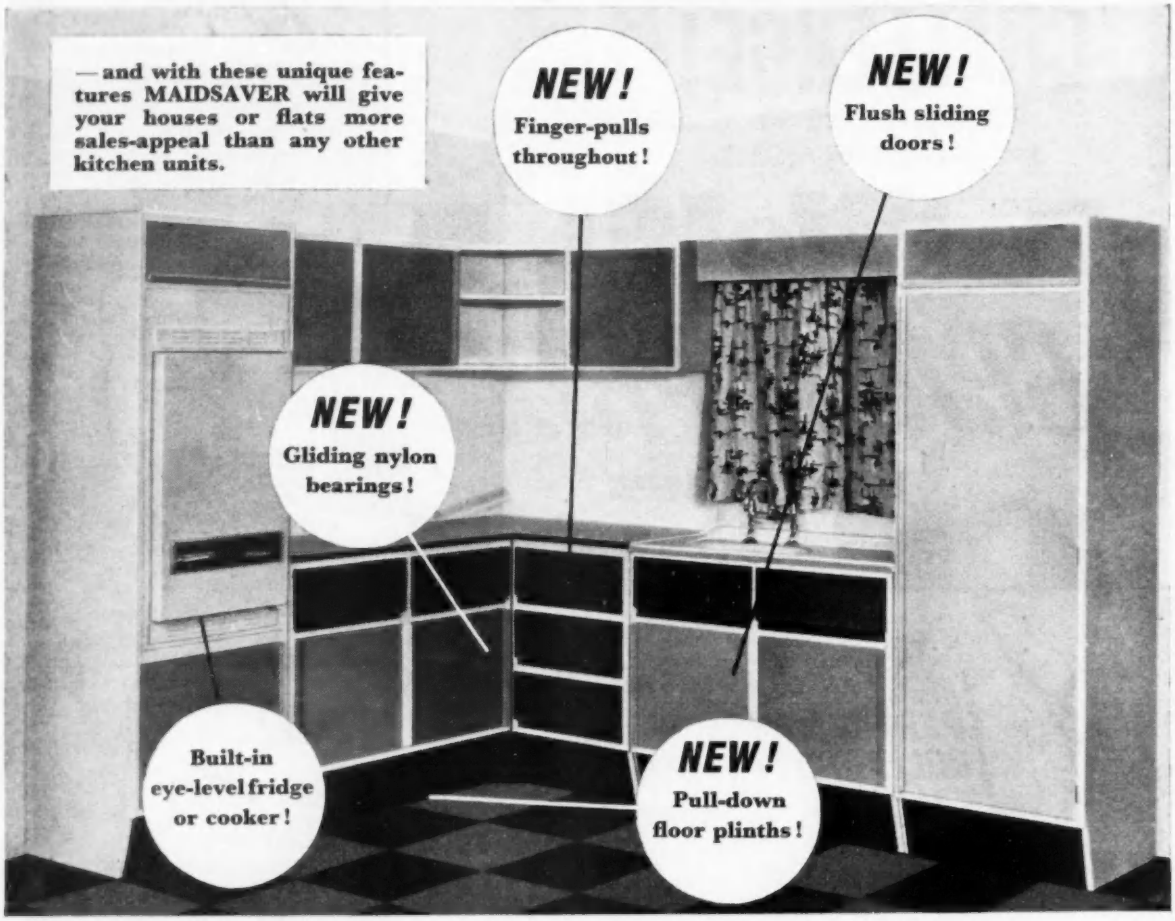

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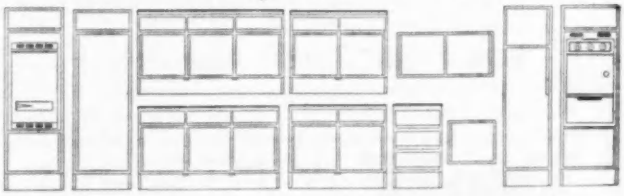

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Lusty MAIDSAVER

of elevated car park in town centre for UDC. S: Edwin Shaw, Council Offices, Haverton Hill-on-Tees. Consulting structural engrs.: Cussons & Ptnrs., Dasteel-hse., Borough-rd., Middlesbrough. (A) Brims & Co. Ltd., Pandon-bldgs., City-rd., Newcastle-on-Tyne, £35,000.

BILLINGHAM-ON-TEES. — Proposed workshop extensions for the Furness Shipbuilding Co. Ltd., Haverton Hill. Consulting engrs.: T. F. Burns & Ptnrs., Ellison-pl., Newcastle-on-Tyne. Piling and foundations. (A) Brims & Co. Ltd., Pandon-bldgs., City-rd., Newcastle-on-Tyne. Floors, drains and machine founds. (A) Demolition & Construction Co. Ltd., London. Steelwork. (A) Findlay & Co. Ltd., Motherwell. Sheeting. (A) Manchester Slate Co. Glazing. (A) British Patent Glazing Co. Roof decking. (A) Robertson Thain Ltd.

BIRMINGHAM. — Construction of two miles of new sewer between Saltley and Minworth for the Birmingham Tame and Rea District Drainage Bd. (A) Sir Robt. McAlpine & Sons Ltd., £865,610.

BIRMINGHAM.—Following for City C.: Erection of community centre at Nechells Green. (A) Wates Ltd., Edgbaston, Birmingham 16, £53,983. Alterations and extensions to Oldknow sec. sch. (A) Smith Bros. (Construction) Ltd., Sparbrook, Birmingham 11, £114,800. Erection of community centre at Shard End. (A) G. Stubbings Ltd., Erdington, Birmingham 23, £41,752. Erection of 45 dwellings and 53 garages at Brandwood and Kings Norton areas. (A) W. A. Hornsey (Builders) Ltd., Birmingham 4, £79,041. Erection of 36 dwellings and 22 garages at Ward End House, Washwood Heath. (A) C. Bryant & Son Ltd., Small Heath, Birmingham 10, £101,410.

BOURNEMOUTH.—Erection of 40 flats and 21 garages in two blocks, with ancillary works, at 29 and 29a Surrey-rd., Bournemouth, for Patcham Developments Ltd. Architects: Messrs. Gotch & Ptnrs., 8 City-rd., Finsbury-sq., London, EC1. (A) James Drewitt & Son Ltd., building and civil engineering contractors, Ringwood-rd., West Howe, Bournemouth, £120,237 (negotiated contract). Block of 16 flats with garages under at 3 St. Winifred's-rd., Bournemouth, for St. Winifred's Property Co. Ltd. Architectural consultant: K. Valdmanis, 53 Goldhurst-ter., London, NW6. (A) James Drewitt & Son Ltd., West Howe, Bournemouth, £45,291.

CHESTER. — Houses, flats, maisonettes, shops, car ports, South Newtown, for TC. (A) F. Shepherd & Son Ltd., York, £708,153.

CONSETT (Blackhill). — Provision of nursery accommodation at Richard Murray Hospital for Newcastle Regional Hospital Bd. Architects: Fennell & Baddiley. (A) H. Ayton & Sons Ltd., £18,997.

DARLINGTON. — Erection of pathology laboratory and out-patients' dept. at Memorial Hospital for Newcastle Regional Hospital Bd. (A) Walter Thompson (Contrs.) Ltd., £55,943.

DOWN.—Additions to the Bangor Hospital for Northern Ireland Hospitals Auth. S. A. Devon, 6 Callender-st., Belfast, architect. (A) D. R. Martin & Son Ltd., Whitehouse, Newtownabbey. Est. cost £140,000.

DURHAM.—Erection of Seaham gram. tech. sch. for CC. Architects: Newrick & Blackbell, 58 John-st., Sunderland. QS: Martin & Felton, Lloyds Bank-chbrs., Fawcett-st., Sunderland. Consulting engrs.: R. W. Gregory & Ptnrs., Pilgrim-hse., Pilgrim-st., Newcastle-on-Tyne. (A) J. Huntley & Son Ltd., Marion-st., Sunderland, £328,489.

EASTBOURNE.—Erection of 38 flats and eight garages at Faygate-rd./Binsted-cl., Hampden Park, for CBC. Boro' E&S is R. Williams. Quantities by Martin & Martin, Hyde-gdns., Eastbourne. (A) E. Powell & Sons Ltd., 24 Channel View-rd., Eastbourne, £74,939.

FARNBOROUGH.—Erection of shopping centre at Victoria-rd. for F. Woolworth & Co. Ltd. (A) Kyle Stewart (Contractors) Ltd., Wembley Park, London.

FARNHAM. — Repairs and restoration works at Farnham Castle for the Church Commissioners. (A) R. Holford & Co. Ltd., Walnut Tree-cl., Guildford.

GATESHEAD.—Erection of wholesale branch on Team Valley trading estate for Kodak Ltd., Wealdstone, Middx. (A) John Laing Construction Ltd., 12 New Bridge-st., Newcastle-on-Tyne.

HAMPSHIRE.—Erection of new buildings and alterations at Brockenhurst county gram. sch. for CC. Pinckney & Gott, architects, 7 Gray's Inn-sq., WC1. Quantities by Davis, Belfield & Everest.

James Drewitt & Sons Ltd. ...	£127,628
A. J. Dunning & Sons Ltd.	127,299
Brazier & Sons Ltd.	126,984
H. Burgess Ltd.	126,104
(A) A. E. Jukes & Son Ltd. ...	124,889

HANDLEY.—Workshops, offices, central repair depot, for Ches. CC. (A) H. Jones & Sons, Wrexham, £62,998.

JARROW. — Adaptations to Danesfield Maternity Hospital and adjoining 'Laurel Bank.' Architects: Fennell & Baddiley. (A) M. V. Forster Ltd., Sunderland, £27,179.

LIVERPOOL.—Extensions Hall of Residence, Mossley Hill, for Liverpool University Senate. (A) Henry Boot & Sons Ltd., Liverpool. Licensed premises, Cranleigh-rd., Childwall Valley estate, for Higson's Brewery Ltd. (A) W. A. Barnes & Son (Builders) Ltd.

LONDON CC.—Alterations and extensions to Catford Boys' sec. sch., Brownhill-rd. Architects: Bronek Katz & R. Vaugham. Quantity surveyors: Davis, Belfield & Everest. (A) Griggs & Son, £356,834.

(GD) LONDON (Air Ministry).—Contracts to the value of £4,000 or over for week ended May 5: *Artificers' work:* North Weald, etc. (Essex); L. W. Free, FCA, Receiver & Manager for S. Cronin & Sons Ltd., 192 Warley Hill, Brentwood, Essex. *Medium pressure hot water heating & steam plant (supply and installation):* Troodos, Cyprus; Saunders & Taylor Ltd., Camberwell, London, SE17. *Renewing boilers and conversion of existing boilers to oil firing, etc.:* Upwood, Huntingdon; The Freeman Heating Co. Ltd., Balham, London, SW17. *High pressure hot water heating installation:* Finningley, Yorkshire; Norris Warming Co. Ltd., Theobalds-rd., London, WC1. *Heating installation:* Shawbury, Salop; Edwd. Deane & Beal Ltd., Temple-ave., London, EC4. *Land maintenance:* Fylingdales Moor, Yorkshire; Mitchell & Struthers Ltd., Kilmarnock, Ayrshire. *Preservation work (paved areas):* Fairford, Glos.; The Limmer Trinidad Lake Asphalt Co. Ltd., Vauxhall Bridge-rd., London, SW1. *Runway resurfacing:* Chivenor, Barnstaple, Devon; Chittenden & Simmons Ltd., Palace-st., London, SW1. *Electrical mains distribution:* Fylingdales Moor, Yorkshire; Holliday (Eastern) Ltd., Ipswich, Suffolk. *Electrical installations (external and internal):* Aden; Thorpe & Thorpe Ltd., New Broad-st., London, EC2.

(GD) LONDON (British Railways).—New London Midland contracts: Construction of freight concentration depot at Burnley Central Station; The Norwest Construcion Co. Ltd., Netherton, Liverpool, 10. Platform surfacing at Preston Station; Harbour and General Works Ltd., Morecambe, Lancs. Reconstruction of Bridge No. 2 on the Trent Valley Line for electrification headroom and widening; Wilson Lovatt & Sons Ltd., Wolverhampton. Cleaning and painting at electric carriage shed and CME workshops, Stonebridge Park; William Latimer & Co. Ltd., London, SW8. Reconstruction of Stafford Station; G. Percy Trentham Ltd., Longton, Stoke-on-Trent. Renewal of roof coverings at Fleetwood Passenger Station; The Cellactite Co. Ltd., Gravesend, Kent. Renewal of roof coverings at District Engineer's joiners' shop, Liverpool Edge Hill; Industrial Engineering Ltd., Hanover Square, London, W1.

(GD) LONDON (War Dept.).—Contracts placed for week ended April 28: *Dorset:* Heating and ventilating at Bovington Camp; James Drewitt & Son Ltd., Bournemouth. *Co. Down:* Building at Newry; Henry Cole, Newry. *Gloucestershire:* Building at Ashchurch; Espley & Co. Ltd., Evesham. *Kent:* Miscellaneous at Canterbury; CAS (Contractors) Ltd., London, W8. Miscellaneous at Shorncliffe; J. J. Clayson & Son Ltd., Folkestone. *Lanarkshire:* Miscellaneous at Glasgow; James McBrearty Ltd., Glasgow. *Midlothian:* Miscellaneous at Edinburgh; Crudens Ltd., Musselburgh. *Pembrokeshire:* Painting and decorating at Pembroke Dock; Norman Oldham Ltd., Cardiff.

(GD) LONDON (MoW).—Contracts placed for week ended April 29: *Hertfordshire:* Construction of extension to workshops at Department of Scientific and Industrial Research, Warren Spring Laboratory, Stevenage; Davies & Rentowl Ltd., Victoria-st., St. Albans. Erection of Crown Building, Boreham Wood; W. J. Simms, Son & Cooke Ltd., Haydn-rd., Sherwood, Nottinghamshire. *Kent:* Demolition work and provision of new lavatory block at Head Post Office, Gravesend; G. E. Wallis & Sons Ltd., Fairfield-wks., Gravesend. *Lancashire:* Alterations to public office—counter—at Head Post Office, Victoria-st., Liverpool; A. Edmonds & Co. Ltd., Constitution-hill, Birmingham 19. Alterations and new extension to Ministry of Pensions & National Insurance, Grasmere-st., Leigh; George Moss & Sons Ltd., St. Helens-rd., Leigh. *Lincolnshire:* Completion of office building at Danegate, Lincoln; W. & J. Simons Ltd., Friars-la., Lincoln. *London:* Alterations and redecorations to offices at Eagle-hse., 90-06 Cannon-st., EC; Clemens Bros. Ltd., 77 Derby-rd., Forest Gate, E7. Erection of branch Post Office at South Lambeth, SW8; Whyatt (Builders) Ltd., 225 Streatham High-rd., SW16. *Norfolk:* Alterations to form telephone engineering centre at sugar store, Kings Lynn; R. G. Carter Ltd., Drayton, Norwich. *Surrey:* Erection of motor transport workshop at Post Office, Walton-on-Thames; W. & E. Simmons Ltd., 4 Rydens-rd., Walton-on-Thames. *Sussex:* Erection of branch post office at George V-ave., Worthing; Keith Andrew & Co. Ltd., Warwick-rd., Worthing. *Yorkshire:* Erection of store, office and workshop at 'The Hawkmills,' Easingwold; Sorrell (York) Ltd., 95 Heworth Village, York.

MANCHESTER.—New branch for Barclays Bank Ltd., at King-st. Architects: W. S. Hatnell & Ptnrs. (A) J. Gerrard & Sons Ltd., £40,000.

MANCHESTER.—Following for Regional Hospital Bd.: Conversion block into chronic sick ward, Ladywell Hospital, Salford. (A) W. Gornall & Sons Ltd., Bolton, £44,525. Operating theatre/admission unit, Royal Manchester Childrens' Hospital. (A) Contractors (Manchester) Ltd., £81,498. Extensions to laboratory, West Park Hospital, Macclesfield. (A) R. Green & Sons Ltd., Chapel-en-le-Frith, £27,056. Improvements to gynaecological dept., Roose Hospital, Bar-

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row-in-Furness. (A) H. Dawson Ltd., Ulverston, £50,166.

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We have examined the records of the Federation of Master Builders Ltd., and we hereby certify that the total membership of the Federation at 31st December, 1960, including approved applications, but excluding any members whose subscriptions are unpaid for 1960, was

12,148

Barsham, Nixon & Hamilton,
Chartered Accountants.

April 13th, 1961

1, Lincoln's Inn Fields, London, W.C.2

The effective membership at the 31st December, 1960, was

12,856

33, John Street, Holborn, London, W.C.1
Tel: CHA 7583

MANCHESTER.—Phase II of refectory block, Oxford-rd., for University of Manchester. (A) J. Gerrard & Sons Ltd., Swinton, Manchester. Conversion shop into bank premises, Union-ter., Cheetham, for Martins Bank Ltd. (A) Henry Green & Son (Builders) Ltd., Manchester.

MIDDLESBROUGH.—19 houses, four flats and nine garages at Easterside estate for TC. Boro' E: J. A. Kenyon. (A) Direct labour, £38,920.

NORTHALLERTON.—21 bungalows for RDC. Architects: Brierley, Syme & Leckenby, 10 Lendal, York. (A) R. B. A. Moody Brothers Ltd., 18 East-rd., Northallerton (seven at Borrowby), £9,540, and W. Thompson Ltd., North End, Northallerton (14 at Romanby), £19,039.

NOTTINGHAM.—51 flats, Mapperley-rd./Elm Bank for Bernard Sunley Investment Trust. (A) Bernard Sunley & Sons Ltd., London, W1.

ORMSKIRK. — 34 dwellings, Queen-st. estate for UDC. (A) J. & R. Woods (Builders) Ltd.

OXFORD.—53 houses and eight garages at Blackbird Leys estate for City C. (A) John Laing & Son Ltd., London, £109,368.

PLYMOUTH.—Erection of new law courts in city centre for City C. City A is H. J. W. Stirling. (A) Richard Costain (Construction) Ltd., £290,000.

POOLE.—New four-storey warehouse and office building for the laboratory chemicals division of The British Drug Houses Ltd. Architect: S. Greenwood. (A) John Laing Construction Ltd., £523,000.

REDCAR.—Erection of 492 houses and 321 garages, etc., at Lakes estate for BC. Architect: F. Gibberd, Harlow, Essex. (A) T.G. Construction Co. Ltd., £950,000.

SHEFFIELD.—Sheffield EC has recommended the acceptance of the tender of G. Longden & Son Ltd., of £299,752 for the construction of the proposed new Sheffield City gram. sch., and of C. A. Wilding & Co. Ltd., of £9,484 for the playing fields.

SOUTH SHIELDS.—Alterations to St. Mary's CoE jun. mixed sch. Architects: J. H. Morton & Son, Martins Bank-chbrs., Fowler-st., South Shields. (A) R. Brown & Son Ltd., 24 Lord-st., South Shields, £21,989.

SOUTH SHIELDS.—Canteen at Commercial-rd. for S. Newman Ltd. Architects: Jack Cotton, Ballard & Blow, 48 Pilgrim-st., Newcastle-on-Tyne. (A) John Cummings, Matamba-ter., Sunderland.

SUNDERLAND.—Depot at East Hendon-rd., Sunderland, for T. Wall & Sons (Ice Cream) Ltd. Architects: William Broadbent, Thompson & Wilson, Hillary-chbrs., Hillary-pl., Leeds, 2. (A) Leslie & Co. Ltd., 80 Woodland-rd., Darlington.

WALSALL.—13 bungalows, Weston-st. for BC. (A) John Dorsett, Pelsall, Walsall, £20,550.

WEST HARTLEPOOL.—Two groups of 134 and 28 houses at Owton Manor estate for TC: Boro' A: A. G. Sinclair. (A) G. M. Pearson & Son Ltd., Front-st., Hetton, Co. Durham, £244,329.

WHITLEY BAY.—Filling station, workshops and showrooms at Claremont-rd. for North Shields Co-op Society Ltd., Camden-st., North Shields. Architects: Waring & Netts, 1 Lansdowne-ter. east, Gosforth. (A) M. J. Liddell & Son, 36 Gt. North-rd., Newcastle-on-Tyne.

WHITLEY BAY.—Supermarket at Earsdon-rd. for Laws Stores Ltd., Gateshead. Architects: Mauchlen, Weightman & Elphick, 12 Saville-row, Newcastle-on-Tyne. (A) Shields Bros., Swalwell, Co. Durham (work commenced).

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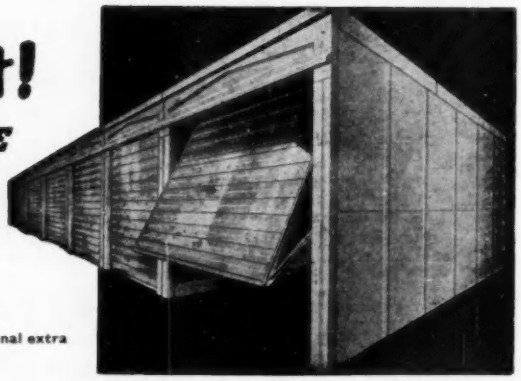

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CONTRACTS

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BOROUGH.

ELDERLY PERSONS' FLATS.

TENDERS are invited for the CONSTRUCTION OF 19 BEDSITTING ROOM FLATS AND ONE TWO-BEDROOM FLAT IN ONE THREE-STOREY BLOCK at the junction of Hagden-lane and Brightwell-road, Watford.

Applications for documents must be made to Mr. F. C. Sage, Borough Engineer and Surveyor, Town Hall, Watford, not later than 2 p.m. on MONDAY, 29th MAY, 1961.

Contract documents will be forwarded as soon as possible after that date.

No Tender will be considered unless upon the official form which must be sent to the undersigned in the envelope provided for the purpose by 2 p.m. on WEDNESDAY, 5th JULY, 1961.

GORDON H. HALL,
Town Clerk.

Town Hall,
Watford.
April, 1961.

LINDSEY
COUNTY COUNCIL.

TENDERS are invited for the ERECTION OF PHASE II OF BERETUN SECONDARY MODERN SCHOOL, Barton-on-Humber, together with External Works and Services and Sundry Alterations to the existing school. Approximate floor area of new work is 22,600 sq. ft. comprising one Three-Storey Block and several Single-Storey Blocks, all of "Thermagard" construction. Bills of Quantities may be obtained from A. Ronald Clark, A.R.I.B.A., A.M.T.P.I., County Architect, County Offices, Lincoln, who must receive tender by 10 a.m. on the 14th JUNE, 1961.

SALFORD CITY.

PROPOSED TWO-BAY SUB FIRE STATION AT 443-5 BURY NEW-ROAD, SALFORD, 7.

FIRM-PRICE TENDERS are invited for the proposed TWO-BAY SUB FIRE STATION at 443-5 Bury New-road, Salford, 7.

Conditions of Contract and Drawings may be inspected at, and Bill of Quantities and Form of Firm-Price Tender obtained from, the City Engineer and Surveyor's Department, Town Hall, Salford, 3, on payment of a deposit of £3 3s., which will be returned on submission of a bona fide Firm-Price Tender not subsequently withdrawn.

Firm-Price Tenders on the prescribed form, sealed in the envelope provided and bearing no other mark or identification, must be forwarded to the Town Clerk so as to be received not later than 10 a.m. on MONDAY, 29th MAY, 1961.

The Council does not bind itself to accept the lowest or any Firm-Price Tender.

WIDNES
BOROUGH.

Fixed price TENDERS are invited for the work of STRENGTHENING OF EXISTING FLOORS at West Bank County Primary School, by the INSERTION OF STEEL CHANNELS ALONGSIDE THE EXISTING WOODEN BEAMS. The work to be carried out between 14th July and 21st August, 1961.

Specification and Form of Tender obtainable from the Borough Architect, Brendan House, Widnes-road, Widnes.

Tenders, in special envelope provided, must be delivered to the undersigned not later than 10 a.m. FRIDAY, 26th MAY, 1961.

The Council does not bind itself to accept the lowest or any Tender.

FRANK HOWARTH,
Town Clerk.

Town Hall,
Widnes.
May, 1961.

Amended Advertisement.

GRAVESEND
BOROUGH.

TENDERS, returnable by the 31st MAY, 1961, are invited for IMPROVEMENTS TO 610 HOUSES on three Estates, comprising REMOVAL OF KITCHENERS, INSTALLATION OF TILED SURROUNDS, ETC., AND CONVERSION OF HOT WATER SYSTEMS.

Tender forms and documents available on application from the Borough Engineer and Surveyor, 6 Woodville-terrace, Gravesend.

F. W. HARRISON,
Town Clerk.

4 Woodville-terrace,
Gravesend.
April, 1961.

SALFORD CITY.

THREE-STOREY FLATS ON SMALL SITES.

Firm price TENDERS are invited for the CONSTRUCTION OF THREE-STOREY ONE-BEDROOM FLATS as below :—

Contract No. 1: 15 FLATS, Medway-close, Salford, 5.

Contract No. 2: 18 FLATS, rear of 93 Eccles Old-road, Salford, 6.

Contractors may Tender for one or both contracts but each contract must be Tendered for separately. Applicants for documents must clearly state for which scheme(s) they wish to Tender.

Conditions of Contract and Drawings may be inspected at, and Bills of Quantities and Forms of Firm Price Tender obtained from the City Engineer and Surveyor's Dept., Town Hall, Salford, 3, on payment of a deposit in respect of each contract of £2 2s. 0d., which will be returned on submission of a bona fide Firm Price Tender not subsequently withdrawn.

Firm Price Tender(s) on the prescribed form, sealed in the envelope(s) provided and bearing no other mark or identification, must be forwarded to the Town Clerk so as to be received not later than 10 a.m. on MONDAY, 29th MAY, 1961.

The Council does not bind itself to accept the lowest or any Firm Price Tender.

WALSALL
COUNTY BOROUGH.

HOUSING COMMITTEE.
ERECTION OF :
74 HOUSES AND 6 BUNGALOWS, DARLASTON-ROAD ALLOTMENT SITE, WALSALL ;
12 HOUSES, MULBERRY-PLACE, BLOXWICH, WALSALL.

Separate FIXED-PRICE TENDERS are invited for the ERECTION OF THE DWELLINGS to the above 2 contracts.

Bills of Quantities and Forms of Tender can be obtained at any time after the 15th MAY, 1961, from the undersigned upon payment of a deposit of Two Guineas which will be refunded upon receipt of a bona fide tender.

Tenders must be sent in a sealed envelope addressed to the Town Clerk, Council House, Walsall, bearing the name of the contract and the number of dwellings, and are to be received not later than mid-day on MONDAY, 5th JUNE, 1961.

Any tender received after the time stated or otherwise than in an envelope endorsed as required, may be rejected.

An envelope suitably addressed and endorsed will be supplied with the form of Tender and it is desired that this envelope be used.

The Council do not bind themselves to accept the lowest or any tender.

M. E. HABERSHON,
Borough Engineer and Surveyor.

Council House,
Walsall.
3rd May, 1961.

ABERYSTWYTH
BOROUGH COUNCIL.

ERECTION OF GARAGES.

FIXED, LUMP-SUM TENDERS are invited for the ERECTION AND COMPLETION OF TWO BLOCKS OF SIXTEEN GARAGES, on a site at Fifth-avenue, Penparcau, Aberystwyth.

Specification, Form of Tender and Plans may be obtained from the Borough Surveyor and Water Engineer, Park-avenue, Aberystwyth, on payment of a deposit of £1 1s., which will be refunded on receipt of a bona fide tender for the works or the return of all documents supplied.

Tenders must be delivered to the undersigned not later than 12 noon on MONDAY, 5th JUNE, 1961, in the envelope provided.

The Council do not bind themselves to accept the lowest or any tender.

W. PHILIP DAVIES,
Town Clerk.

Town Hall,
Aberystwyth.
2nd May, 1961.

SOUTHEND-ON-SEA
COUNTY BOROUGH.

TO BUILDING CONTRACTORS.
PROPOSED CONVERSION OF CLASSROOM INTO PARTIALLY DEAF UNIT AT PRINCE-AVENUE INFANTS' SCHOOL.

TENDERS are invited for the PERFORMANCE OF THE WORKS IN CONVERTING CLASSROOM INTO TWO CLASSROOMS FOR PARTIALLY DEAF UNIT AND WORKS INCIDENTAL THERETO at Prince-avenue Infants' School.

R.I.B.A. Conditions of Contract may be inspected, and copies of Form of Tender, Specification and Drawings obtained on and after Tuesday, 16th May, 1961, on application to the Borough Architect, 30 Alexandra-street, Southend-on-Sea.

Sealed Tenders addressed to the undersigned and endorsed "Proposed Partially Deaf Unit, Prince-avenue Infants' School" are to be delivered to this office before 3 p.m. on WEDNESDAY, 7th JUNE, 1961, and no Tender received thereafter will be considered.

No Tender will be received except in the special envelope provided, which shall not bear any name or mark indicating the sender.

The Corporation do not bind themselves to accept the lowest or any Tender.

ARCHIBALD GLEN,
Town Clerk.

SOUTHEND-ON-SEA
COUNTY BOROUGH.

TO BUILDING CONTRACTORS.
PROPOSED CONVERSION OF PRACTICAL ROOMS INTO LABORATORIES AT SOUTHEND HIGH SCHOOL FOR BOYS.

TENDERS are invited for the PERFORMANCE OF THE WORKS IN CONVERTING PRACTICAL ROOMS INTO LABORATORIES AND WORKS INCIDENTAL THERETO at Southend High School for Boys.

R.I.B.A. Conditions of Contract may be inspected, and copies of Form of Tender, Specification and Drawings obtained on and after Tuesday, 16th May, 1961, on application to the Borough Architect, 30 Alexandra-street, Southend-on-Sea.

Sealed Tenders addressed to the undersigned and endorsed "Proposed Laboratories—Southend High School for Boys" are to be delivered to this office before 3 p.m. on WEDNESDAY, 7th JUNE, 1961, and no Tender received thereafter will be considered.

No Tender will be received except in the special envelope provided, which shall not bear any name or mark indicating the sender.

The Corporation do not bind themselves to accept the lowest or any Tender.

ARCHIBALD GLEN,
Town Clerk.

CARDIFF
CITY COUNCIL.

CITY SURVEYOR'S DEPARTMENT.

Fixed price TENDERS are invited for the SUPPLY AND DELIVERY OF APPROXIMATELY 100 SQUARES OF PRIME QUALITY CANADIAN ROCK MAPLE STRIP FLOORING AND ALSO 370 SQUARE YARDS OF HARDWOOD FLOOR BLOCKS, OF SELECTED AND NOMINATED TIMBER.

Moisture content of each of the above must not be less than 9 per cent. or more than 13 per cent.

Conditions of Tender and specification may be obtained from the City Surveyor, City Hall, Cardiff, to whom application should be made.

Tenders will not be considered unless enclosed in a plain sealed envelope endorsed "Tender for Hardwood Blocks and Strip Flooring," addressed to the *undersigned* at the City Hall, Cardiff, and sent by *Registered Post or Recorded Delivery* so as to be received not later than TUESDAY, the 30th MAY, 1961.

The envelope must not bear the name or any mark indicating the identity of the Tenderer.

The Council does not bind itself to accept the lowest or any Tender.

S. TAPPER JONES,
Town Clerk.

City Hall,
Cardiff.
24th April, 1961.

BOURNEMOUTH
COUNTY BOROUGH.

TO HEATING CONTRACTORS.

TENDERS are invited for a sub-contract on a fixed-price basis for the COMPLETE INSTALLATION OF HEATING BOILERS, STORAGE TANKS AND PIPEWORK at St. Michaels School.

Firms wishing to tender should make application to the Borough Architect, Room 106, Town Hall, Bournemouth, not later than 23rd MAY, 1961.

Tenders to be received by me not later than 10 a.m., 6th JUNE, 1961.

A. LINDSAY CLEGG,
Town Clerk.

ABERGAVENNY
RURAL DISTRICT COUNCIL.

Separate LUMP SUM TENDERS are invited for the following :—

(a) Llanwenarth Citra, SMALL WATER SCHEME.

(b) Mardy Bungalows Site, EIGHT 3-BEDROOMED HOUSES.

(c) Llanddewi Skirrid, FOUR 3-BEDROOMED HOUSES, WITH SMALL SEWAGE DISPOSAL WORKS.

(d) Great Oak Housing Site, Brynygwyn, FOUR 3-BEDROOMED HOUSES, WITH SMALL SEWAGE DISPOSAL WORKS.

(e) Lower House Site, Govilon, SITE WORKS, ROADS AND SEWERS.

(f) Llanvapley, FOUR 3-BEDROOMED HOUSES.

Particulars of these Contracts, together with drawings, Specifications, Bills of Quantities, Forms of Tender and submission dates, can be obtained from Mr. D. T. D. Evans, Architect/Surveyor, Abergavenny Rural District Council, Council Offices, Monk-street, Abergavenny.

ARTHUR J. ROGERS,
Clerk of the Council.

Council Offices,
Monk-street,
Abergavenny,
Mon.

SCUNTHORPE
BOROUGH COUNCIL.

HEATING AND VENTILATION WORK TO THE PUBLIC SWIMMING BATHS, DONCASTER-ROAD.

HEATING AND VENTILATION ENGINEERS are invited to make application for their names to be considered for inclusion in the list of Contractors who will be asked to submit a tender for the INSTALLATION OF NO. 2 OIL FIRED STEAM BOILERS rated at 5,000 lb. of steam per hour, LOW PRESSURE HOT WATER HEATING AND POOL WATER SERVICES, together with ancillary pipe work.

Contractors are requested to submit their applications to Mr. F. J. Bowyer, A.M.I.C.E., Borough Surveyor, Lancham-street, Scunthorpe, not later than noon, FRIDAY, 19th MAY, 1961.

FINCHLEY
BOROUGH.

PROVISION AND ERECTION OF CHAIN-LINK AND CLOSE-BOARDED FENCING AT SEVERAL PUBLIC OPEN SPACES.

TENDERS are invited for the PROVISION AND ERECTION OF PLASTIC-COVERED CHAIN LINK, SOME ON NEW ANGLE-IRON STANDARDS AND SOME ON EXISTING CONCRETE STANDARDS, AND CLOSE-BOARDED FENCING at a number of their open spaces.

The Specification and Form of Tender may be obtained at the office of the Borough Engineer and Surveyor, 294-296 Regents Park-road, Finchley, N.3.

No Tender will be considered unless received in a plain sealed envelope which must be marked "Tender for Fencing on Open Spaces," and not bear any name or mark indicating the sender.

Tenders must reach the undersigned by not later than 12 NOON on MONDAY, 26th JUNE, 1961.

The Council does not bind itself to accept the lowest or any Tender.

R. M. FRANKLIN,
Town Clerk.

Municipal Offices,
Finchley, N.3.

WEST SUSSEX
COUNTY COUNCIL.

Contractors wishing to submit a TENDER for the undermentioned project, are invited to apply for permission to tender ; such applications to be addressed to the County Architect, County Hall, Chichester, to reach him not later than 29th MAY, 1961.

EXTENSIONS AT WORTHING COLLEGE OF FURTHER EDUCATION (Job No. 6782).

Quantities will be issued on or about 21st July, 1961.

The County Council does not bind itself to accept the lowest or any Tender, and the firm whose Tender is accepted must be prepared to enter into a contract in a form to be prepared by me.

T. C. HAYWARD,
Clerk of the County Council.

County Hall,
Chichester.

WALLASEY
COUNTY BOROUGH.

ERECTION OF SPORTS PAVILION.

TENDERS to reach the undersigned by the 6th JUNE, 1961, are invited for the ERECTION OF A 2-STOREY BRICK AND RECONSTRUCTED STONE SPORTS PAVILION at Lingham Park Moreton. Bills of Quantities and Form of Tender obtainable from Borough Architect, Town Hall, Wallasey.

A. G. HARRISON,
Town Clerk.

MIDDLESBROUGH
COUNTY BOROUGH.

ANNUAL TENDERS FOR THE SUPPLY OF MATERIALS AND SERVICES.

Tenders are invited for the following for the period 1st July, 1961, to 30th June, 1962.

Tender No. 1: COATED MACADAM, FINE COLD ASPHALT AND SPECIAL CARPETS.

Tender No. 2: HOT PROCESS ROLLED ASPHALT — SUPPLYING AND LAYING (B.S. 594).

Tender No. 3: CEMENT (BAGGED AND BULK).

Tender No. 4: BROKEN STONE AND CHIPPINGS (IGNEOUS).

Tender No. 5: SAND AND GRAVEL.

Tender No. 6: BROKEN SLAG AND PENNING.

Tender No. 7: CONCRETE KERBS, FLAGS, QUADRANTS, ETC.

Tender No. 8: PRECAST CONCRETE GOODS—FENCE, CLOTHES POSTS AND LINTOLS.

Tender No. 9: C.I. MANHOLE COVERS AND GULLEY GRATES.

Tender No. 10: SALT GLAZED PIPES.

Tender No. 11: LEAD PIPE AND SHEET, SOLDER.

Tender No. 12: PLASTER, PLASTERBOARD, PARAMOUNT CELLULAR PARTITION, BUILDING AND PLASTERING LIMES.

Tender No. 13: NAILS, SCREWS, NUTS AND BOLTS.

Tender No. 14: ASBESTOS CEMENT RAINWATER AND SOIL GOODS.

Tender No. 15: C. I. RAINWATER AND SOIL GOODS.

Tender No. 16: SLATES.

Tender No. 17: QUALLS, FIREBRICKS AND FIRE CEMENT.

Tender No. 18: DOMESTIC M.S. BACK BOILERS AND FIREBOTTOMS.

Tender No. 19: CHIMNEY POTS AND GLAZED TILES.

Tender No. 20: COPPER TUBE.

Tender No. 21: V.E. METAL DRAINING BOARDS.

Tender No. 22: SANITARY WARE—LAVATORY BASINS, SINKS AND W.C. PEDESTALS, ETC.

Tender No. 23: W.C. SEATS—PLASTIC AND TIMBER.

Tender No. 24: READY MIXED CONCRETE.

Tender No. 25: GAS MANTLES FOR STREET LIGHTING.

Tender No. 26: PLUMBERS' BRASSWARE—TAPS, TRAPS, B A I I. FLOATS AND WASTE FITTINGS.

Tender No. 27: COPPER TUBE FITTINGS—CAPILLARY AND COMPRESSION.

Tender No. 50: PAINT, PUTTY AND DISTEMPER.

Tender No. 51: DECORATORS' BRUSHES.

Tender No. 52: GLASS—SHEET.

Tender No. 53: ELECTRIC LAMPS.

Tender No. 54: GALVANISED HOLLOW-WARE — DUST BINS, GAS BOILERS AND BUCKETS.

Particulars and Forms of Tender from the Borough Engineer, Municipal Buildings, Middlesbrough. Tenders to be received by the Town Clerk in sealed envelopes provided on or before FRIDAY, 26th MAY, 1961.

BEDFORDSHIRE
EDUCATION COMMITTEE.

PROPOSED COUNTY SECONDARY SCHOOL, TODDINGTON.

Building Contractors who wish to be considered to TENDER on the basis of a FIXED PRICE CONTRACT for the ERECTION OF THIS SCHOOL should apply, giving details of similar contracts recently carried out, to the County Architect, Shire Hall, Bedford, by 18th MAY, 1961.

The school will comprise EIGHT CLASSROOMS, SIX PRACTICAL ROOMS, ASSEMBLY HALL, LIBRARY, SANITARY ACCOMMODATION, STAFF ROOMS, STORAGE, ETC., and will be constructed of load bearing brickwork, the total superficial area being 27,300 sq. ft. (Approximate cost £120,000.)

Bills of Quantities will be issued to the contractors selected to tender.

Heating Engineers and Electrical Contractors are also invited to submit their names by the above date for consideration to tender for the undermentioned sub-contracts at this school:—

(a) ENGINEERING SERVICES;
(b) ELECTRICAL INSTALLATION.

The Committee do not bind themselves to accept the lowest or any Tender.

WHITSTABLE
URBAN DISTRICT COUNCIL.

CIVIL DEFENCE RESCUE VEHICLE GARAGE.

TENDERS are invited for the CONSTRUCTION OF A GARAGE IN BRICKWORK AND WITH A REINFORCED CONCRETE ROOF together with attendant site works in drainage and providing a hard standing.

Forms of Tender and Specification may be obtained from and plans will be available for inspection during normal office hours at the office of the Engineer and Surveyor, The Castle, Whitstable. Tenders in plain sealed envelopes endorsed "Tender—Civil Defence Rescue Vehicle Garage" are to be delivered to the undersigned not later than first post on TUESDAY, 23rd MAY, 1961.

F. TOMLINSON,
Clerk of the Council.

The Castle,
Whitstable.
2nd May, 1961.

YORK CITY.

APPROVED LIST OF BUILDING CONTRACTORS.

The City Council is preparing a list of Approved Contractors from which firms will be invited to submit FIXED-PRICE TENDERS FOR NEW BUILDING WORKS estimated to cost £10,000 and over.

Building Contractors wishing to be included on this list should submit their names, and state which of the undermentioned categories they are able to undertake:

(a) Contracts from £10,000 to £25,000 in value.
(b) Contracts from £25,000 to £50,000 in value.
(c) Contracts from £50,000 to £100,000 in value.
(d) Contracts over £100,000 in value.

Contractors wishing to be considered for specific types of building work (e.g.: Housing, Schools, etc.) should state this in their applications.

Any Contractor who has not previously undertaken work for the Council of the category and value applied for should forward satisfactory evidence of their financial standing and their ability to undertake the works.

Applications for inclusion on the list should be submitted to:

E. FIRTH, F.R.I.B.A., A.M.T.P.I.,
City Architect.

8 St. Leonard's-place,
York.

DEPTFORD
BOROUGH COUNCIL.

TENDERS are invited for the SUPPLY, DELIVERY AND ERECTION OF (a) 404 yd. run 2 ft. 6 in. GALVANISED MILD STEEL HURDLE RAILINGS AND GATES at St. Paul's Churchyard, S.E.8, and (b) 76 GALVANISED RAILED PANELS to Play Areas at Clyde-street Flats, S.E.8.

Specifications, Conditions of Contracts, and full particulars may be obtained from the Borough Engineer, Deptford Town Hall, New Cross, S.E.14.

Tenders must be returned to the undersigned in the envelopes provided not later than 4 p.m. on MONDAY, 12th JUNE, 1961.

The Council does not bind itself to accept the lowest or any tender.

ERNEST FIELD,
Town Clerk.

Deptford Town Hall,
New Cross, S.E.14.
May, 1961.

CANNOCK
URBAN DISTRICT COUNCIL.

ERECTION OF PERMANENT BUILDINGS.

FIXED PRICE TENDERS are invited for the ERECTION OF TRADITIONAL TYPE DWELLINGS AND ANCILLARY BUILDINGS on the following sites:—

(i) 8 ONE-BEDROOM FLATS at Hednesford-road, Pye Green—Site 12B;
(ii) 4 ONE-BEDROOM FLATS AND 2 GARAGES at Moss-street, Chadsmoor—Site 52;
(iii) 14 DWELLINGS, 12 GARAGES AND 1 LOCK-UP SHOP at Bevan Lee-road, Cannock—Site 17E;
(iv) 104 DWELLINGS AND 37 GARAGES at Belt-road, Hednesford—Site 70.

Applications for Bills of Quantities should be forwarded so as to reach the Council's Architect, Mr. H. Wilcox, A.R.I.B.A., High Green, Cannock, by 29th MAY, and must be accompanied by a deposit of two guineas which will be returned on receipt of a bona fide Tender or return of documents by 26th JUNE. Plans may be inspected at the Architect's office during normal office hours.

Tenders in sealed envelopes bearing no mark indicating the name of the sender but endorsed "Tender for Dwellings," are to be received by me before 10 a.m. on MONDAY, 26th JUNE, 1961.

The Council do not bind themselves to accept the lowest or any Tender and reserve the right to enter into a separate contract in respect of each site.

H. C. ALLEN,
Clerk of the Council.

Council House,
The Green,
Cannock,
Staffs.

BECKENHAM
BOROUGH.

Fixed price TENDERS are invited for the ERECTION AND COMPLETION OF 28 BRICK-BUILT LOCK-UP GARAGES TOGETHER WITH HARD STANDING FOR 32 CARS ON THE BROMLEY-ROAD HOUSING ESTATE.

Bills of Quantities and Form of Tender may be obtained and the Drawings and General Conditions of Contract inspected on application to Mr. James Dove, A.M.Inst.C.E., Borough Engineer, Town Hall, Beckenham, on payment of a deposit of £2 which will be refunded on receipt of a bona fide Tender which is not subsequently withdrawn.

Sealed Tenders, in the plain official envelope provided, endorsed "Tender for Garages, Bromley-road," must reach me not later than 5 p.m. on FRIDAY, 2nd JUNE, 1961.

The Council does not bind itself to accept the lowest or any Tender.

R. WEBSTER STORR,
Town Clerk.

Town Hall,
Beckenham,
Kent.
2nd May, 1961.

HARROW
BOROUGH.

ERECTION OF FENCES.

TENDERS are invited for the ERECTION OF BOUNDARY AND REAR GARDEN FENCES, SIDE ENTRANCE GATES AND CLOSE BOARDED SCREENS on the Corporation's Weald Village and Kenton-lane Housing Estates, Harrow Weald. The work entails the removal of existing fences, the erection of approximately 9,700 yds. run of Woodlands fencing, 1,325 yds. run 6 ft. high close boarded fencing and gates, etc., on the Weald Village Estate, and approximately 625 yds. run Woodlands fencing, 135 yds. run 6 ft. high close boarded fencing and gates, etc., on the Kenton-lane Estate.

Conditions of Contract may be inspected at the office of, and a copy of the Form of Tender and Specification obtained on application to, the Borough Engineer, Council Offices, "Cottesmore," 48 Uxbridge-road, Stanmore, Middlesex, upon payment of two pounds, by crossed cheque for each Tender, made payable to the Harrow Corporation, returnable where a bona fide Tender reaches me within the prescribed time.

Tenders, on the prescribed form, must be enclosed in plain sealed envelopes, bearing no indication, or mark, of the the sender and carrying the label provided, suitably endorsed and delivered to my Office, not later than 10 a.m. on TUESDAY, 13th JUNE, 1961.

The Corporation does not bind itself to accept the lowest or any Tender.

DAVID PRITCHARD,
Town Clerk.

HARPENDEN
URBAN DISTRICT COUNCIL.

ERECTION OF STAFF HOUSES AT WESTFIELD CEMETERY AND PIGGOTTSHILL-LANE SEWAGE WORKS.

Applications are invited from Registered Builders wishing to TENDER for the ERECTION OF A DETACHED HOUSE AND OFFICE AND TWO SEMI-DETACHED HOUSES AT WESTFIELD CEMETERY AND TWO HOUSES AND TWO FLATS AT PIGGOTTSHILL-LANE SEWAGE WORKS, HARPENDEN, together with EXTERNAL WORKS AND SERVICES.

Plans may be seen on any day during normal working hours at the Office of the Council's Engineer and Surveyor, Mr. H. Pettingale, A.M.I.C.E., A.R.I.C.S., A.M.I.Mun.E., from whom copies of the Bills of Quantities and Form of Tender may be obtained on payment of a deposit of £2 2s. 0d., which will be returned on receipt of a bona fide Tender not subsequently withdrawn, and the return of all documents.

Tenders in a plain sealed envelope, endorsed "Staff Housing," to be delivered to the Clerk of the Council, Harpenden Hall, Harpenden, Hertfordshire, on or before NOON on MONDAY, 5th JUNE, 1961.

The Council do not bind themselves to accept the lowest or any Tender.

FREDERICK A. HARRIS,
Clerk of the Council.

Harpenden Hall,
Harpenden,
Herts.
May, 1961.

ESSEX
COUNTY COUNCIL.

EXTERNAL AND INTERNAL DECORATIONS.

Contractors wishing to submit FIRM PRICE TENDERS for the following should forward their names, from which panels will be chosen and provided with specifications.

(1) Grays, Thameside County Primary School. Estimated cost £3,000.
(2) Hornchurch, Ardleigh Green County Primary School. Estimated cost £2,300.
(3) Grays, Torells County Secondary Primary Boys' School. Estimated cost £3,000.
(4) Rainham County Secondary School. Estimated cost £2,700.

Contracts (2), (3) and (4) are to be carried out during Summer and Christmas holidays but on Contract (1) some works will be permitted during term time.

Internal decorations are required at all schools and at Rainham County Secondary School external decorations also.

Separate applications for each contract to reach the undersigned not later than 20th MAY, 1961.

H. CONOLLY,
C.B.E., F.R.I.B.A.,
County Architect.

County Hall,
Chelmsford.

RICHMOND (SURREY)
BOROUGH.

TO BUILDERS.

The Council invite TENDERS for EXTERNAL PAINTING AND MINOR REPAIRS TO 82 HOUSES AND 12 FLATS in the Ham area.

Forms of tender, specification and schedule may be obtained from the Borough Engineer and Surveyor, King's road, Richmond.

Tenders sealed in envelope provided must be received not later than 5 p.m. on MONDAY, 5th JUNE, 1961.

The Council do not bind themselves to accept the lowest or any Tender.

CLIFFORD HEYWORTH,
Town Clerk.

Town Hall,
Richmond,
Surrey.

HUNTINGDONSHIRE
EDUCATION COMMITTEE.

SAWTRY—ERECTION OF A TWO-FORM ENTRY SECONDARY MODERN SCHOOL, TOGETHER WITH ADULT PROVISION, YOUTH CENTRE AND CARETAKER'S COTTAGE.

Contractors desirous of submitting a Fixed Price TENDER for the ABOVE PROJECT are invited to submit their names to S. M. Holloway, A.R.I.B.A., County Architect, County Buildings, Huntingdon by not later than 12 NOON on TUESDAY, 23rd MAY, 1961. From the names submitted a panel of contractors will be selected to whom Tender documents will be sent on or about Friday, 26th May, 1961, for Tenders to be received on or about MONDAY, 26th JUNE, 1961.

The school will be mainly of brick construction with pitched timber roofs. The foundations are to be short bored pile and beam foundations laid by a specialist contractor.

A. C. AYLWARD,
Clerk of the County Council.

County Buildings,
Huntingdon.
11th May, 1961.

READING
COUNTY BOROUGH.

TO STEEL-WORK AND BUILDING CONTRACTORS.

Firm price TENDERS are invited for (a) the ERECTION OF A STEEL-FRAMED BUILDING COMPLETE WITH ASBESTOS ROOF CLADDING AND PART VERTICAL CLADDING FOR GARAGE PURPOSES AT THE HIGHWAYS DEPOT, ABATTOIRS-ROAD, READING; (b) PROVISION OF CONCRETE FOUNDATIONS, SITE CONCRETE AND DWARF WALLS WITH ANCILLARY WORKS IN CONNECTION WITH THE FOREGOING.

General Conditions may be inspected and specifications with drawings and Tender forms obtained from the Borough Architect, Town Hall, Reading. Tenders to the Town Clerk, Town Hall, Reading, by NOON, WEDNESDAY, 31st MAY, 1961. No Tender considered unless enclosed in the endorsed envelope provided which shall bear no indication of the sender. The Corporation do not bind themselves to accept the lowest or any Tender.

ALDERSHOT
BOROUGH.

SELECTIVE TENDERING.

The Aldershot Council has adopted selective tendering and consideration is now being given to compiling lists of builders, public works and civil engineering contractors, for use in connection with Works of varying character and value.

Firms who are interested are invited to apply for inclusion in one or more of these lists.

Applications should be made on the forms which may be obtained from F. W. Taylor, M.I.C.E., M.I.Mun.E., A.M.I.Struct.E., Borough Engineer and Surveyor, Town Hall, Aldershot, and returned to him not later than noon on 29th MAY, 1961, in the endorsed envelope provided.

H. B. SALES,
Town Clerk.

Town Hall,
Aldershot.

WIDNES
BOROUGH.

CONSTRUCTION OF GARAGE BASES AND HARDSTANDINGS.

TENDERS are invited for the CONSTRUCTION OF BASES AND HARDSTANDINGS FOR 2 BLOCKS OF GARAGES (one of twelve and one of eleven) on the Kingsway Estate, Widnes.

Drawings and General Conditions of Contract (R.I.B.A. Form) may be inspected and Form of Tender may be obtained from the Borough Architect, Brendan House, Widnes-road, Widnes.

Tenders on the forms provided must be delivered to the undersigned in the special envelope provided, without any distinguishing mark, not later than 10 a.m., MONDAY, 29th MAY, 1961.

FRANK HOWARTH,
Town Clerk.

Town Hall,
Widnes.
May, 1961.

BOOTLE
COUNTY BOROUGH.

PERMANENT HOUSING PROGRAMME.
SCHEME 36(n).

TENDERS are invited for the ERECTION OF TWO BLOCKS OF THREE SHOPS WITH FIVE MAISONETTES OVER, TWO FOUR-STOREY BLOCKS OF TWELVE MAISONETTES AND TWENTY-SEVEN GARAGES, at Parklane, Netherton.

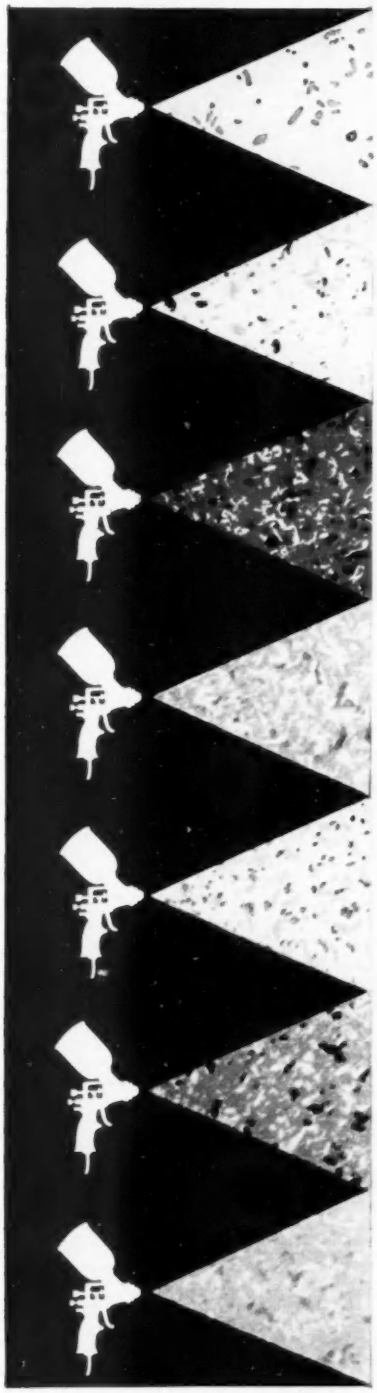
Bills of Quantities and Forms of Tender may be obtained from the Borough Surveyor, Town Hall, Bootle 20, Lancs.

Tenders will be returnable not later than 10 a.m. on 1st JUNE, 1961.

HAROLD PARTINGTON,
Town Clerk.

Borough Surveyor's Department,
Town Hall,
Bootle 20,
Lancs.
4th May, 1961.

PORTERFLECK



32 NEW, EXCITING MULTICOLOUR EFFECTS

A rich multicolour finish in one spray application

...and it's dust repellent!

Here's a rich, decorative surface that looks like expensive plastic sheeting or a careful stippling job. Yet it's done in one quick spray application with this fascinating new paint, Porterfleck.

Porterfleck has startling physical characteristics: it keeps its secondary colour "flecks" suspended in the basic colour, so that they don't mix even when applied; and it is "anti-static"—its molecular composition stops dirt from settling and keeps the surface clean indefinitely.

Porterfleck saves maintenance

Besides its revolutionary dirt-repellent property, proof against normal accretion of dust and grime, Porterfleck has a very hard surface which is washable and highly resistant to scratching and chipping. It has an unusually long life and maintenance costs are cut almost to zero.

Porterfleck saves labour

The film produced by one coat of Porterfleck is 4-5 times as thick as a normal paint film, so it camouflages irregularities in plaster and other surface defects. Applied by spray, Porterfleck is touch-dry in 2 hours, hard overnight.

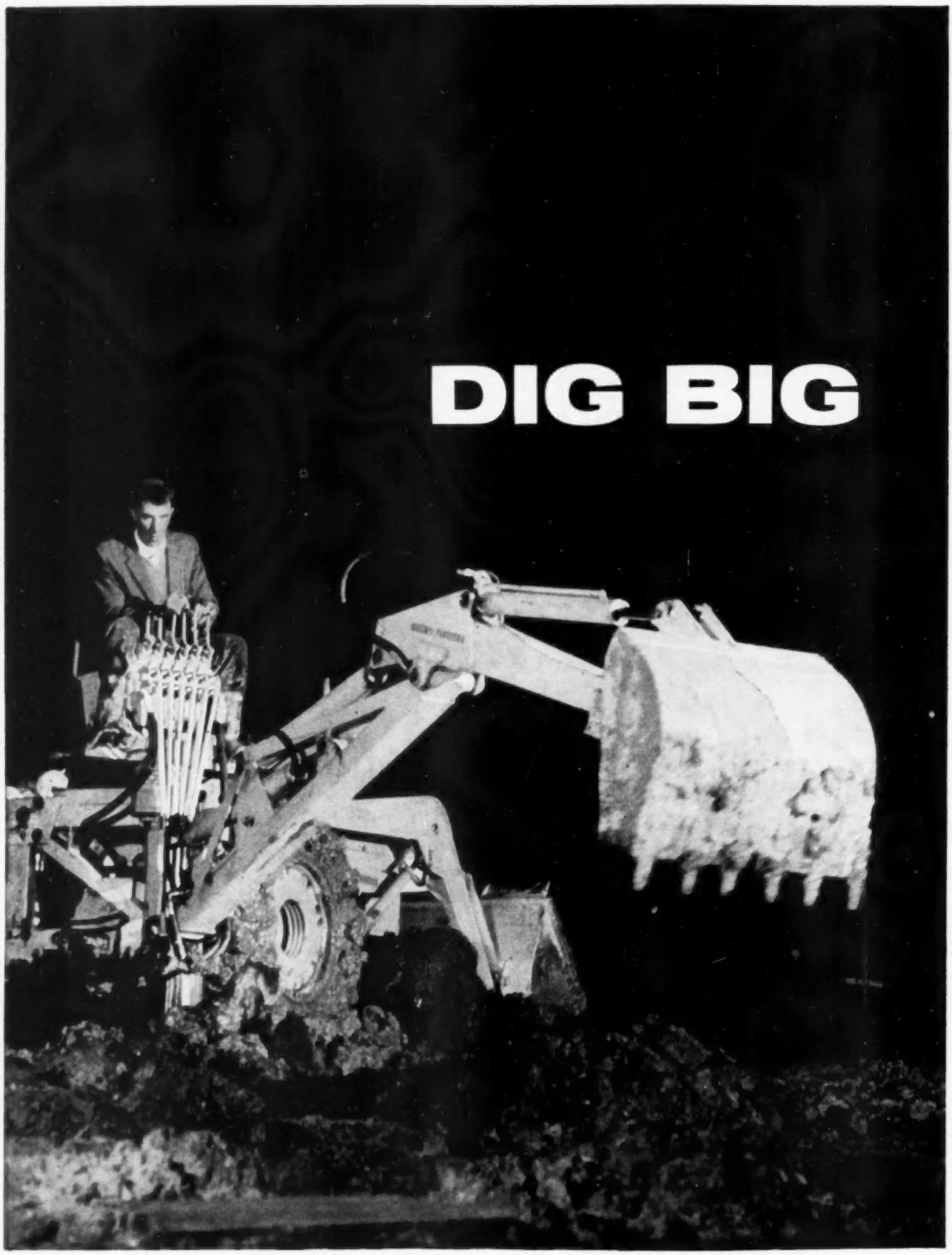
Porterfleck costs very little more than a traditional one-colour finish and can often be applied direct, thus saving the cost of priming and undercoating.

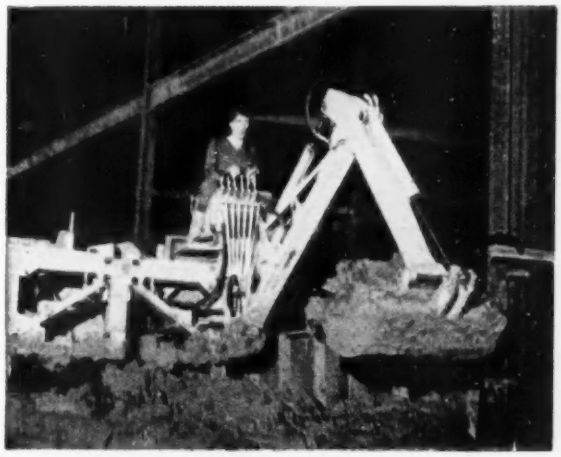
SPECIFY PORTERFLECK FOR...

...HARD WEAR in hotels, hospitals, halls and public rooms, canteens, kitchens, bathrooms... QUICK APPLICATION in shop display, exhibition work, film, TV and theatre sets.

PORTERFLECK

Full details and shade card available on request from:
SISSONS BROTHERS & COMPANY LIMITED, BANKSIDE, HULL


DIG BIG



DIG OFFSET

WITH THE POWER-PACKED MANOEUVRABLE

M·F 702

THE FINEST TRACTOR-DIGGER-SHOVEL IN ITS CLASS!

DIG MORE · FASTER · SAFER!

COMPARE! Highest POWER WEIGHT RATIO of any rig in this class.

COMPARE! DIGS FLUSH . . . alongside buildings, fences and other obstructions.

COMPARE! 200° CONTINUOUS WORKING ARC. Will load, dig or dump—*even at right angles to tractor!*

COMPARE! OPERATOR FACES JOB . . . at all times, because operator's seat moves with the digger.

COMPARE! VERTICALLY CONTROLLED STABILISER FEET . . . individually retractable for levelling-up on slopes without delay.

SET A DATE WE'LL DEMONSTRATE

Please send me brochure and full technical specifications on the M-F Tractor-Digger-Shovel.

Please arrange for demonstration on .....

..... at .....

Name .....

Address .....

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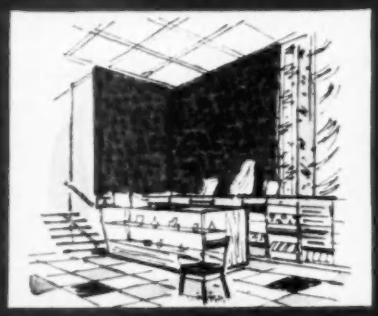
Tel. No. .....

Type of Business .....

Fill in this coupon and send to:
MASSEY-FERGUSON, INDUSTRIAL DIV., A.3 COVENTRY

MASSEY-FERGUSON

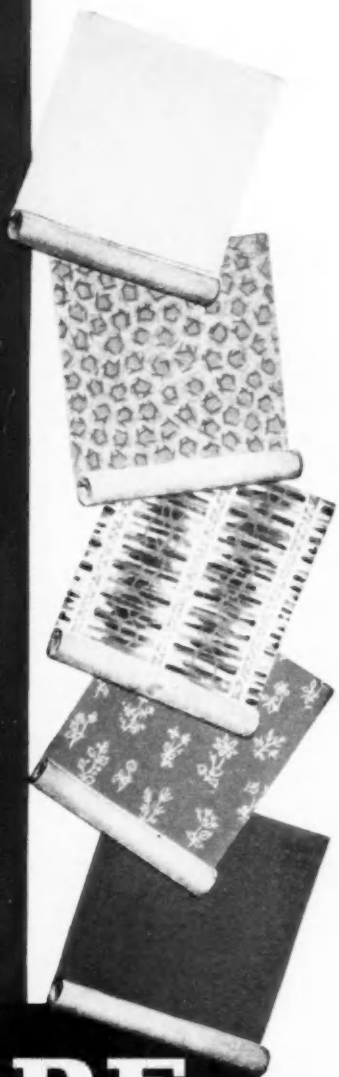


The quiet revolution

Whilst modern interior design has been making its unparalleled strides of recent years, a minor revolution has been taking place quietly in the background. This is the swing to vinyl as a wall covering. Now, with the introduction of Muralionide, this movement has gained rapidly in momentum. Muralionide is the first range of P.V.C. coated fabrics in the country to include patterns on large modular scales designed specifically for use as a wallcovering. It is most durable. Kicks, scratches and general wear and tear make little impression on its tough P.V.C. surface. Fabric-backed, Muralionide is chip-proof, peel-proof and washable. And the colours,fused in under high temperature,are resistant to fading. Yet practical as it is, Muralionide, with its matt finish and thick embossed texture, has the look and feel of luxury.

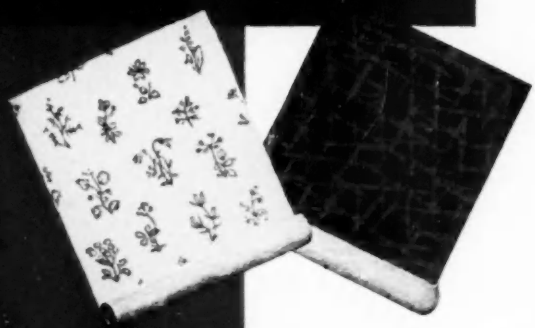
Lodric Hotel · Coventry
A.B.C. Cinema · Nottingham
Farnham Hospital
Cambridge University
Gatwick Airport
Blackpool Airport
Midland Bank · Holborn
Boots Pure Drug Co. Ltd · Birmingham
Minister of Works Authority · Regent Street · London
Ward Showrooms · R. B. Paterson & Co. Ltd · Birmingham

are a few of the very many places where Muralionide is already proving its worth.



MURALIONIDE

vinyl wallcovering



Muralionide, 57 inches in repeated in width 12 and 24 inches long. Hung, it costs from 12/6 to 16/6 a roll. Depending on the area involved, type of installation etc. This range has been developed to meet most contemporary requirements.
It incorporates designs on large modular scales, heavily textured effects and pure colours which form the B.S. 2660 range.

For further information please write to:-
JAS. WILLIAMSON & SON LTD · LANCASTER

LEATHERHEAD
URBAN DISTRICT COUNCIL.

TENDERS are invited for the ERECTION OF SEWAGE WORKS MANAGER'S HOUSE AND BUILDING CONTAINING OFFICE, LABORATORY AND GARAGE.

Bills of Quantities and Tender Documents from Engineer and Surveyor, Red House, Leatherhead, on payment of £2 2s. deposit, returnable on receipt of bona fide Tender. Drawings and specification may be inspected at Red House.

Tenders and completed Bills of Quantities to be returned by NOON MONDAY, 29th MAY, 1961.

J. EDE,
Clerk of the Council.

Council Offices,
Leatherhead.

WEST RIDING OF YORKSHIRE
COUNTY COUNCIL.

TENDERS are invited for the following works:—

1. EXTENSION TO KITCHEN AT DEARNSIDE SECONDARY SCHOOL.
2. REORGANISATION OF HOUSECRAFT ROOM AT MEXBOROUGH GRAMMAR SCHOOL.
3. REORGANISATION OF HOUSECRAFT ROOM AT OWSTON-PARK SECONDARY SCHOOL.

The specifications and drawings are available on application to the Divisional Architect, Planet-road, Adwick-le-Street, near Doncaster.

Sealed Tenders must be addressed to me, the undersigned, and received at Room 3, County Hall, Wakefield, not later than 9 a.m. on TUESDAY, the 13th JUNE, 1961.

BERNARD KENYON,
Clerk of the County Council.

FRIERN BARNET
URBAN DISTRICT COUNCIL.

CLEANING OF ARTIFICIAL STONEWORK.

TENDERS are invited from contractors for the CLEANING OF THE ARTIFICIAL STONEWORK at the Town Hall.

Documents may be obtained from E. H. Start, A.M.I.C.E., A.M.I.Mun.E., Engineer and Surveyor, Town Hall, N.11, and must be returned to the undersigned not later than 10 a.m. on MONDAY, 5th JUNE, 1961, in envelopes endorsed "Cleaning of Stonework" and bearing no indication of the sender.

R. S. CLOTHIER,
Clerk of the Council.

ROMFORD
BOROUGH.

ROLLER SKATING PAVILION—KING GEORGE'S FIELD.

TENDERS are invited for the SUPPLY AND ERECTION OF A SECTIONAL TIMBER BUILDING, MEASURING 24 FT. x 18 FT. WITH CEDAR CLADDING, INTERNAL LININGS AND PARTITIONS, ETC., COMPLETE UPON A PREPARED FOUNDATION.

Contract documents obtainable from the Borough Engineer and Surveyor, Town Hall, Romford, on deposit of a cheque for £2 2s. 0d. returnable on receipt by the Town Clerk of a bona fide Tender in the enveloped provided by 26th MAY.

BOURNEMOUTH
COUNTY BOROUGH.

TO BUILDING CONTRACTORS.

TENDERS are invited, on a "Fixed Price" basis, for the ERECTION OF PROTECTIVE WIRE FENCING at the Roman Catholic Secondary School Site, Holdenhurst-avenue, Bournemouth.

Plans, Specification and Tender Forms obtainable from, and Conditions of Contract inspected at, the Borough Architect's Office, Room 106, Town Hall, Bournemouth, on payment of a deposit of one guinea, refundable on receipt of a bona fide tender not subsequently withdrawn and the return of all documents supplied.

Tenders to be received by me not later than 10 a.m., 10th JUNE, 1961.

A. LINDSAY CLEGG,
Town Clerk.

BLACKPOOL
COUNTY BOROUGH.

NORBRECK SCHOOL
DETACHED EXTENSION TO FORM THREE CLASSROOMS, CLOAKS AND TOILETS.

Applications are invited for TENDER documents, with £2 deposit to Borough Surveyor, P.O. Box 17, Municipal Offices, Blackpool, by 2.30 p.m., 16th MAY, 1961.

LEICESTER
ADMINISTRATIVE COUNTY.

Builders and Contractors with adequate facilities to complete in a limited period desirous of being considered for inclusion in a selected list of contractors to TENDER on a firm price basis for EXTENSIONS TO:

(a) Burbage Hastings High School.
(b) Enderby Brockington Secondary Modern School.

to submit names to County Architect, 123 London-road, Leicester, by 22nd MAY, 1961. Bills of Quantities available 2nd JUNE. Tenders to be returned not later than 12 noon on MONDAY, 10th JULY, 1961.

BUCKINGHAMSHIRE
COUNTY COUNCIL.

Applications are invited from contractors wishing to TENDER for the following building projects:—

1. Newport Pagnell: ERECTION OF A SECONDARY MODERN SCHOOL, estimated cost approximately £110,000. Bills of Quantities available 2nd June, 1961. Tenders returned by 3rd JULY, 1961.
2. Newport Pagnell: EXTENSIONS TO "THE GREEN" OLD PEOPLE'S HOME, estimated cost approximately £40,000. Bills of Quantities available 2nd June, 1961. Tenders returned by 28th JUNE, 1961.
3. High Wycombe: ERECTION OF THE SECOND PHASE OF THE ROYAL GRAMMAR SCHOOL, estimated cost approximately £130,000. Bills of Quantities available 2nd June, 1961. Tenders returned by 3rd JULY, 1961.
4. High Wycombe: ERECTION OF A SCIENCE LABORATORY AT HATTERS-LANE S.M. SCHOOL, estimated cost approximately £5,000. Bills of Quantities available 31st May, 1961. Tenders returned by 3rd JULY, 1961.
5. High Wycombe: ERECTION OF A KITCHEN AND DINING ROOM AT SANDS C.P. SCHOOL, estimated cost approximately £8,000. Bills of Quantities available 5th June, 1961. Tenders returned by 3rd JULY, 1961.
6. Langley: ERECTION OF A FIRE STATION AT LANGLEY AND A BLOCK OF FLATS AT SLOUGH, estimated cost approximately £150,000. Bills of Quantities available 5th June, 1961. Tenders returned by 3rd JULY, 1961.
7. Aylesbury: ERECTION OF A JUNIOR SCHOOL, estimated cost approximately £57,000. Bills of Quantities available 2nd June, 1961. Tenders returned by 3rd JULY, 1961.
8. Aylesbury: EXTENSIONS TO THE COUNTY MUSEUM, estimated cost approximately £8,000. Bills of Quantities available 9th June, 1961. Tenders returned by 3rd JULY, 1961.
9. Princes Risborough: IMPROVEMENTS TO THE SANITATION AT THE COUNTY SECONDARY SCHOOL, estimated to cost approximately £3,500. Bills of Quantities available 5th June, 1961. Tenders returned by 3rd JULY, 1961.
10. Denham: ADDITIONS TO THE ALDERBOURNE SECONDARY MODERN SCHOOL, estimated to cost approximately £6,000. Bills of Quantities available 2nd June, 1961. Tenders returned by 3rd JULY, 1961.
11. Dropmore: ERECTION OF A HALL AND DINING ROOM AT THE COUNTY PRIMARY SCHOOL, estimated to cost approximately £8,000. Bills of Quantities available 22nd May, 1961. Tenders returned by 26th JUNE, 1961.
12. Buckingham: ERECTION OF BRANCH LIBRARY AND NURSES' FLATS, estimated to cost approximately £30,000. Bills of Quantities available 15th May, 1961. Tenders returned 12th JUNE, 1961.
13. Chesham: ERECTION OF AN OLD PEOPLE'S HOME, estimated to cost approximately £60,000. Bills of Quantities available 31st May, 1961. Tenders returned by 28th JUNE, 1961.
14. Monks Risborough: ERECTION OF A HALL AND TWO CLASSROOMS AT THE C. OF E. SCHOOL, estimated cost approximately £10,000. Bills of Quantities available 2nd June, 1961. Tenders returned by 3rd JULY, 1961.
15. Beaconsfield: ERECTION OF FOUR POLICE HOUSES AT HOLTSPUR, estimated to cost approximately £8,750. Bills of Quantities available 9th June, 1961. Tenders returned by 3rd JULY, 1961.
16. Wing: ADAPTATIONS TO THE COUNTY PRIMARY SCHOOL, estimated to cost approximately £10,000. Bills of Quantities available 12th June, 1961. Tenders returned by 3rd JULY, 1961.
17. Newport Pagnell: ERECTION OF A POLICE POST SERVICE AREA ON M.1 MOTORWAY, estimated cost approximately £4,000, specification available 9th June 1961. Tenders returned by 3rd JULY, 1961.

Contractors are asked to make application to the County Architect, County Offices, Aylesbury, indicating for which works they wish to Tender, as soon as possible. A deposit of £1 3s. for Bills of Quantities is required for projects Nos. 1 to 16 inclusive, which will be returned on receipt of a bona fide Tender not subsequently withdrawn, or in such other circumstances as the Council may approve.

The Council do not bind themselves to accept the lowest or any Tender.

CHESTER
COUNTY.

TENDERS required for the ERECTION OF NORTH CHESHIRE CENTRAL COLLEGE OF FURTHER EDUCATION, TIMPERLEY (SALE). (Approximate value £230,000.)

Drawings may be seen at the Office of Messrs. R. S. Bigins & Associates, Richmond-place, Boughton, Chester.

Applications for Bills of Quantities, accompanied by a remittance of two guineas, made payable to the Cheshire County Council and crossed "Westminster Bank Limited" (which will be returned on receipt of a bona fide Tender), should reach me not later than MONDAY, 29th MAY, 1961.

Tenders are due by 10 a.m. on MONDAY, 26th JUNE, 1961.

EDGAR TABERNER, A.R.I.B.A.,
County Architect.

County Hall,
Chester.

WHITSTABLE
URBAN DISTRICT COUNCIL.

CONVERSION OF "STEAM PACKET," HARBOUR-STREET, WHITSTABLE.

TENDERS are invited for the CONVERSION OF THE ABOVE BUILDING INTO OFFICES AND A FLAT.

Form of Tender, Specification and other contract documents may be obtained from, and the drawings available for inspection during normal office hours at, the office of the Engineer and Surveyor, The Castle, Whitstable.

Tenders, in plain sealed envelopes endorsed "Tender for the Conversion of The Steam Packet," are to be delivered to the undersigned not later than NOON on MONDAY, 5th JUNE, 1961.

F. TOMLINSON,
Clerk of the Council.

The Castle,
Whitstable.
9th May, 1961.

COULSDON AND PURLEY
URBAN DISTRICT COUNCIL.

ERECTION OF LIBRARY AT OLD COULSDON.

TENDERS are invited for the above.

Applications for Bills of Quantities and Form of Tender to the undersigned with a deposit of £3 3s. which will be refunded upon receipt of a bona fide Tender.

Plans may be inspected at the office of the Architect, Mr. E. F. Starling, B.A., A.R.I.B.A., 29a Bell-street, Reigate, Surrey.

Sealed Tenders endorsed "Tender for Old Coulsdon Library" must be delivered to the undersigned by FIRST POST on MONDAY, 5th JUNE, 1961.

The Council do not bind themselves to accept the lowest or any Tender.

ERIC F. J. FELIX,
Clerk of the Council.

Council Offices,
Purley,
Surrey.

DURHAM
COUNTY COUNCIL.

TENDERS invited:

Hebburn Newtown County School—RENEWAL OF FLOORS.

Application for further details to County Architect, South-street, Durham, not later than 24th MAY, 1961.

J. K. HOPE,
Clerk of the County Council.

Shire Hall,
Durham.

GUNNERSBURY PARK
JOINT COMMITTEE.

EXTERNAL PAINTING, LARGE MANSION.

TENDERS are invited for the ABOVE WORK, and specification of work can be obtained from the Borough Engineer, Town Hall, Acton, W.3, and are to be returned to the Clerk and Superintendent, Gunnersbury Park, W.3, not later than MONDAY, 12th JUNE, 1961. Work must be carried out by a scaffold or cradle.

WATFORD
BOROUGH.

RETILING OF ROOFS.

TENDERS are invited for RETILING THE ROOFS OF 40 HOUSES, the approximate total area being 240 squares.

The work comprises the erection of scaffolding; stripping of existing roofs; provision and fixing of battens and felting; and laying of plain concrete tiling.

Applications for documents with a deposit of £2 2s. (returnable on receipt of bona fide tender) must be sent to Mr. F. C. Sage, Borough Engineer and Surveyor, Town Hall, Watford, Herts., not later than TUESDAY, 23rd MAY, 1961.

GORDON H. HALL,
Town Clerk.

Town Hall,
Watford.

LUTON
BOROUGH.

Fixed price TENDERS invited for ELECTRICAL REWIRING 281 B.I.S.F. TYPE HOUSES, ASHCROFT ESTATE.

Documents from Borough Architect, Town Hall, Luton. Tenders to Town Clerk by NOON on FRIDAY, 2nd JUNE, 1961.

SOUTHAMPTON
C.B.C.

Invites TENDERS for ERECTION OF PAVILION AT STONEHAM-LANE (EAST SIDE), SOUTHAMPTON.

Architects Messrs. E. M. Galloway and Partners.

Write for particulars and Bill of Quantities to Borough Architect, Civic Centre, Southampton, by 27th MAY, 1961.

Tender returnable by 26th JUNE, 1961.

CHISLEHURST & SIDCUP
URBAN DISTRICT COUNCIL.

ERECTION OF PUBLIC CONVENIENCES, SIDCUP.

Contractors wishing to TENDER should apply immediately to Engineer and Surveyor, Manor House, Sidcup, enclosing £2 2s. refundable on receipt of a bona fide Tender not subsequently withdrawn. Bill of Quantities will be despatched early June.

BATH CITY.
HEALTH COMMITTEE.

TENDERS are invited for the ELECTRICAL INSTALLATION at Nos. 3, 4 and 5 North Parade Buildings, Bath.

Copies of the Specification and drawing may be obtained from the Surveyor of Corporate Property, Guildhall, Bath, on payment of £2 2s. deposit which will be refunded on receipt of a bona fide Tender not subsequently withdrawn.

Tenders to be returned to the undersigned not later than WEDNESDAY, 31st MAY, 1961, in the special envelope provided.

The Corporation do not undertake to accept the lowest or any Tender.

JARED E. DIXON,
Town Clerk.

Guildhall,
Bath.

WANDSWORTH
METROPOLITAN BOROUGH.

PUBLIC CONVENIENCE.

Contractors wishing to TENDER for ERECTION OF A NEW PUBLIC CONVENIENCE AND SMALL DEPOT AT LEIGHAM COURT-ROAD, S.W.16, should submit names to me by TUESDAY, 23rd MAY, 1961 giving details of experience, plant and technical and supervisory staff available together with names of two technical and two financial referees.

Drawings may be examined at office of Borough Engineer and Architect, Municipal Buildings, S.W.18.

J. NOEL MARTIN,
Town Clerk.

Municipal Buildings,
Wandsworth,
S.W.18.

PUBLIC APPOINTMENTS

AIR MINISTRY

IN LONDON REQUIRE ENGINEERING DESIGNER DRAUGHTSMEN.

Salary (inner London scale) Grade II, £1,048-£1,215; Grade III, £658-£1,048 (£866 at age 25)—starting salary depends on age, qualifications and experience:—

CIVIL ENGINEERING DESIGNER DRAUGHTSMEN for work on one or more of (a) foul drainage and sewage disposal, (b) water supply and distribution, (c) roads, pavements, earthworks and stormwater drainage. (Grades II and III.)

Candidates should have served a recognised apprenticeship or have had equivalent training and also adequate practical experience. Possession of recognised technical qualification an advantage—financial assistance and time off may be allowed for recognised courses of study for technical qualifications. 5-day week with 18 days' paid leave p.a. initially. Promotion and pension prospects. Some overseas tours with special allowances in addition to salary.

Applicants, who must be natural born British subjects, should write (quoting Kings Cross O/N 807) to Air Ministry, W.G.d., Lacon House, Theobalds-road, London, W.C.1, or to any Employment Exchange, giving age, details of training, qualifications and full particulars of former posts held. Candidates selected will normally be interviewed in London and certain expenses reimbursed. Only candidates selected for interview will be notified.

NOTTINGHAM CITY.
ESTATES AND HOUSING COMMITTEE.

Applications are invited for the following appointments in the Chief Architect's Section of the Estates Department:—

(a) ASSISTANT ARCHITECT, A.P.T. Grade IV, £1,140-£1,310;
(b) ASSISTANT ARCHITECTS, A.P.T. Grade III, £960-£1,140;
(c) ARCHITECTURAL ASSISTANT, A.P.T. Grade II, £815-£960;
(d) ARCHITECTURAL ASSISTANT, A.P.T. Grade I, £645-£815.

Applicants for (a) should preferably be Associates of the Royal Institute of British Architects, or if not so qualified, have had appropriate professional experience, and for (b) should preferably have passed parts 1 and 2 of the R.I.B.A. final examination. Applicants for (c) and (d) should have passed the intermediate examination of the R.I.B.A.

Commencing salary in each case will be in accordance with qualifications and experience.

There is a large and interesting programme of comprehensive estate development and redevelopment schemes, including multi-storey dwellings, shopping centres, and all ancillary buildings.

The architects and assistants appointed will work in small self-contained teams under the general direction of a Group Leader and will be responsible for the design, construction and management of projects.

The appointments will be subject to the National Joint Council's Scheme of Conditions of Service.

Applications, stating age, qualifications, experience, present appointment and salary, and naming two referees, should be sent to the Estates Surveyor and Valuer, The Guildhall, Nottingham, by TUESDAY, 30th MAY, 1961.

T. J. OWEN,
Town Clerk.

The Guildhall,
Nottingham.

COUNTY BOROUGH OF EAST HAM

ARCHITECTS

Applications are invited for the following temporary appointments:—

SENIOR ASSISTANT ARCHITECTS

SALARY £1,330—£1,500

Salaries in excess of the minimum may be paid according to qualifications and experience. The appointments are for work on a new Technical College costing more than £700,000 and are expected to be for a period of not less than two years. Further details and applications forms returnable by **26th May, 1961,** from the **Town Clerk, Town Hall, East Ham, E.6.**

AIR MINISTRY

require CLERKS OF WORKS (BUILDING), Grade III, at R.A.F. and Ministry of Aviation stations throughout the United Kingdom for supervision of construction and maintenance work.

Salary, which is dependent upon age, qualifications and experience, ranges from £776 (age 25) to £961 maximum in Grade III. There are pension prospects and also opportunities of advancement to numerous posts in the higher grades, viz.:

Technical Grade II: £961-£1,098. 250 posts.

Technical Grade I: £1,098-£1,348. 146 posts.

Technical Grade B: £1,348-£1,552. 24 posts.

Vacancies occurring in the higher grades are as a rule, filled by promotion of existing staff.

Overseas tours for which special allowances ranging, at present, up to £1,800 p.a. are payable in addition to a higher salary. Financial assistance and time off allowed for recognised courses of study leading to higher qualifications. 5-day week with 18 days' paid leave a year initially.

QUALIFICATIONS: Applicants, who must be natural born British subjects up to the age 45, should hold O.N.C. (Building) or Final C. & G. Certificate in a craft, or Associate Membership of Institute of Clerks of Works, or equivalent qualification. They must also have served apprenticeship as craftsmen with 3 years' experience as foreman of trade and have experience as general foreman or clerk of works on big contracts. 3 years' full-time or 5 years' part-time training in a building school or 3 years' experience in a building office in estimating, costing and management will be accepted in lieu of apprenticeship.

Forms from Manager (P.E.U.), Ministry of Labour, Professional & Executive Register, Atlantic House, Farringdon-street, London, E.C.4. Candidates selected will normally be interviewed in London and certain expenses reimbursed. Only applicants selected for interview will be advised.

LEEDS
UNIVERSITY.

DEPARTMENT OF CIVIL ENGINEERING.

Applications are invited for appointment to a full-time LECTURESHIP IN ARCHITECTURAL ENGINEERING in the Department of Civil Engineering at a salary on the scale £1,050 x £50-£1,400 x £75-£1,850 (efficiency bar at £1,550) a year, according to qualifications and experience. Applicants should preferably hold qualifications in both architecture and civil or structural engineering, but engineers or architects with particular interests or experience in the aesthetics of structural design will be considered. Applications (three copies) stating date of birth, qualifications and experience, together with the names of three referees, should reach the Registrar, The University, Leeds, 2, not later than 1st JUNE, 1961.

SHEFFIELD
UNIVERSITY.

Applications are invited for the immediate appointment of an experienced CLERK OF WORKS to supervise the construction of the final stages of an Athletics Centre (comprising large Swimming Bath, Gymnasium, Squash and Fives Courts). Building is expected to commence about 1st July, 1961. Commencing salary £1,000 per annum.

Applications, giving full details of age, qualifications, experience, present and previous appointments (with dates), present salary and the names and addresses of two referees, should reach the Bursar, The University, Western Bank, Sheffield, 10, not later than 20th MAY, 1961.

HOYLAND NETHER
URBAN DISTRICT COUNCIL.

APPOINTMENT OF ASSISTANT SURVEYOR.

Applications are invited for the above appointment in the Engineer and Surveyor's Department, at a salary within Grade A.P.T. II according to qualifications.

Candidates must have good experience in surveying, levelling, preparation of layouts, working drawings, specifications, quantities and checking contractors final accounts.

The appointment will be subject to the National Scheme of Conditions of Service and to the Local Government Superannuation Act.

Housing accommodation will be made available if necessary.

Applications endorsed "Assistant Surveyor" stating age, qualifications and experience, together with names and addresses of two referees must be delivered to the undersigned not later than 27th MAY, 1961.

E. COULT,
Clerk of the Council.

Town Hall,
Hoyland,
Nr. Barnsley.
2nd May, 1961.

WILLESDEN
BOROUGH.

Applications are invited for the following permanent appointments:

(a) ARCHITECTURAL ASSISTANT, within Grade A.P.T. III (£960-£1,140 p.a.).

(b) ARCHITECTURAL ASSISTANT, within Grade A.P.T. II (£815-£960 p.a.).

(c) ARCHITECTURAL ASSISTANT, within Grade A.P.T. I (£645-£815 p.a.)

London Weighting is payable in addition to the above salaries.

Candidates for post "A" must be Associates of the R.I.B.A. and Candidates for posts "B" and "C" should have passed the Intermediate Examination of the R.I.B.A.

A programme of interesting and varied works is expected to continue for many years and opportunities are offered to imaginative designers of any age with a contemporary and practical outlook.

The appointments will be superannuable and subject to the National Conditions of Service for a five-day week, but the Council is unable to assist with housing accommodation.

Forms of application and conditions of appointment may be obtained from the Borough Engineer and Surveyor, Town Hall, Dyne-road, Kilburn, N.W.6. Applications to be returned to the undersigned not later than 10 a.m. on MONDAY, 29th MAY, 1961.

(Signed) R. S. FORSTER,
Town Clerk.

LINDSEY
COUNTY COUNCIL.

HIGHWAYS DEPARTMENT.
AMENDED ADVERTISEMENT.

BRIDGE ASSISTANT required for established post, A.P.T. III/IV (£960-£1,310 per annum). Applicants must be fully qualified, and have an interest in structural design and be able to apply their knowledge to the construction of moderate sized bridgeworks. This appointment offers good experience on all types of bridges and associated works.

Local Authority experience not essential and, as an alternative, an experienced, if unqualified, Designer - Draughtsman would be considered at an appropriate salary.

N.J.C. Service Conditions apply. 5-day week.

Applications must be received by 19th MAY, 1961, on forms obtainable from the County Surveyor, County Offices, Lincoln.

MANSFIELD
BOROUGH.

Applications are invited for the following appointments in the Architectural Section of the Borough Engineer and Surveyor's Department:—

(a) ARCHITECTURAL ASSISTANT, Grades III/IV (£960-£1,310 per annum);

(b) GENERAL ARCHITECTURAL ASSISTANT, Grade II (£815-£960 per annum);

(c) JUNIOR ARCHITECTURAL ASSISTANT, Grade A.P.T. I (£645-£815 per annum).

Applicants for appointment (a) must be Corporate Members of the R.I.B.A. and for (b) must have passed the Intermediate Examination of the R.I.B.A., whilst for appointment (c) details of training and experience should be stated.

A house on service tenancy may be rented by the successful applicant for appointment (a) and it is the Corporation's wish that the persons appointed shall live within the Borough.

Applications, stating age, marital state, training, past and present appointments with salary, and experience, together with the names of three referees, should be sent to the Borough Engineer and Surveyor, Carr Bank, Mansfield, Notts., to arrive not later than MONDAY, 29th MAY, 1961.

A. C. SHEPHERD,
Town Clerk.

Carr Bank,
Mansfield,
Notts.

BURY
COUNTY BOROUGH.

Applications are invited for the following permanent appointments:—

(a) SENIOR ASSISTANT PLANNING OFFICERS (two), A.P.T. IV (£1,140-£1,310).

(b) TOWN PLANNING DRAUGHTSMAN, Misc. III (£555-£625).

(c) BUILDING INSPECTOR, A.P.T. II (£815-£960).

(d) BUILDING INSPECTOR, A.P.T. I (£645-£815).

(e) BUILDING CLERK OF WORKS, Misc. V (£685-£760).

The commencing salary will be fixed according to qualifications and experience.

Applicants for appointment (a) should be experienced in either Development Control or Redevelopment and Research projects, and should be professionally qualified.

Applicants for appointment (b) should have had experience in drawing office procedure and preferably in a Town Planning Office.

Applicants for appointment (c) must be suitably qualified and have a thorough knowledge of modern building construction, experience in the examination of plans deposited under Building By-laws and Public Health Acts and inspection of building work during construction.

Applicants for appointment (d) must be suitably qualified and have a thorough knowledge of building construction, inspection of work in progress and the preparation of specifications for minor works.

Applicants for appointment (e) must have a thorough knowledge of the painting trade and be competent to prepare painting specifications and supervise minor general building works.

Consideration will be given to the provision of housing accommodation.

Applications, stating age, qualifications, experience, present and previous appointments and salary, together with the names of two referees, must reach me by 23rd MAY, 1961.

EDWARD S. SMITH,
Town Clerk.

Town Hall,
Bury.
27th April, 1961.

SALFORD CITY.

DIRECT LABOUR BUILDING DEPARTMENT.

Applications are invited for the positions of:—

(a) BUILDING SURVEYOR, Grade A.P.T. III, £960-£1,140 per annum.

Candidates must have had experience in measuring and site records, bonus incentive schemes, purchasing, interim valuations, final accounts. Preference will be given to persons who are Members of the Building Surveyor's Institute, Institute of Quantity Surveyors or equivalent.

(b) TECHNICAL ASSISTANT (HEATING AND ELECTRICAL), Grade A.P.T. III, £960-£1,140 per annum.

Candidates must have had considerable experience in the preparation of estimates for electrical and heating contracting, together with the preparation of specifications for minor alterations and adaptations. Preference will be given to persons holding the Higher National Certificate (Electrical Engineering).

Commencing salary for these posts will be according to qualifications and experience.

Housing accommodation may be provided if required.

Facilities exist for further Professional training and these appointments are superannuable and subject to a satisfactory medical examination.

At present the Department has four/five years' work in hand on the construction of Multi-storey Flats, Houses, Schools and Public Buildings, and there is tremendous scope to gain experience in these fields.

Applications to the General Manager, Direct Labour Building Department, Taylorson-street, Salford 5, to be received by 17th MAY, 1961.

R. RIBBLESDALE THORNTON,
Town Clerk.

METROPOLITAN POLICE.

RECEIVER'S OFFICE.

Applications are invited for the following positions in connection with the design and erection of Police Housing, Police Stations, Single Men's Hostels, Cadets' Residential Training Centres and Magistrates' Courts within the Metropolitan Police District and schemes for major alterations to various Police buildings.

ASSISTANT ARCHITECTS.

Salary: £991 p.a. at age 25, rising by annual increments to £1,490 p.a. (Maximum salary on entry £1,318 p.a. at age 34 or over).

Qualifications: Must be registered Architects.

LEADING ARCHITECTURAL ASSISTANTS.

Salary: £1,048 p.a. rising by annual increments to £1,220 p.a.

Qualifications: Inter-R.I.B.A., H.N.C., or equivalent.

ARCHITECTURAL ASSISTANTS.

Salary: £658 p.a. at age 21 rising by annual increments to £1,048 p.a. (Maximum salary on entry £960 p.a. at age 28 or over.)

Qualifications: O.N.C., Inter-R.I.B.A., or equivalent.

TECHNICAL ASSISTANTS III.

Salary: £752 p.a. at age 21 rising by annual increments to £1,043 p.a. (Maximum salary on entry £939 p.a. at age 28 or over).

Qualifications: Inter-R.I.B.A./R.I.C.S. (Building) or equivalent.

J. INNES ELLIOTT, B.Arch., F.R.I.B.A.,
Chief Architect and Surveyor.

Apply to:
Chief Clerk,
Architect and Surveyor's Department,
New Scotland Yard, S.W.1.

WARWICK
BOROUGH.

Applications are invited for the following appointments:

1. ARCHITECT TO THE BOROUGH SURVEYOR.

Salary within Grade A.P.T. IV (£1,140-£1,310) according to ability and experience.

The person appointed will be fully responsible for the architectural section of the department.

Applicants must be Associate Members of R.I.B.A., with some years of post-graduate experience.

A lump sum car allowance of £120 per annum is made and the Council will assist with housing accommodation if required.

2. ARCHITECTURAL ASSISTANT.

Salary within Grade A.P.T. III (£960-£1,140) and Casual Car User allowance.

Applicants should be at least Intermediate Examination level.

Both the above appointments are subject to the N.J.C. Conditions of Service, Local Government Superannuation Acts, and to the passing of a Medical Examination. Applications stating age, qualifications, training and experience to be delivered to the undersigned with names of two referees by WEDNESDAY, 17th MAY, 1961.

C. E. BROWN, A.M.I.Mun.E.,
Borough Engineer and Surveyor.
23 Jury-street,
Warwick.

CHATHAM
BOROUGH.

Applications are invited for the following appointments:—

1. ASSISTANT ARCHITECT, from professionally qualified and suitably experienced persons. Salary within A.P.T. IV (£1,140-£1,310).

2. ARCHITECTURAL ASSISTANT, from suitably experienced persons. Salary within A.P.T. III (£960-£1,140).

Applications, with the names and addresses of two referees, should be delivered to Mr. J. A. T. Richards, Borough Engineer and Surveyor, Town Hall, Chatham, not later than SATURDAY, 20th MAY, 1961.

Housing accommodation will be available in appropriate cases.

The appointments will be (a) in accordance with the National Scheme of Conditions of Service, (b) terminable by one month's notice on either side, and (c) superannuable, subject to satisfactory medical report.

In accordance with their usual practice the Council will require the successful candidates to give an undertaking to remain in the Council's service for two years.

ROWLAND NEWNES,
Town Clerk.

Town Hall,
Chatham.

LEICESTER CITY.

CITY SURVEYOR'S DEPARTMENT.

Applications are invited for the appointment of a TECHNICAL ASSISTANT in my Engineering Branch at a salary up to Grade A.P.T. II (maximum £960 p.a.) according to qualifications and experience. A knowledge of building construction will be an advantage.

The Local Government Superannuation Acts will apply.

Applications, stating age, qualifications and experience and the names of two referees, should be forwarded to the undersigned by 19th MAY, 1961.

Housing accommodation may be made available.

JOHN L. BECKETT, M.I.C.E.,
City Surveyor.

Town Hall,
Leicester.

PLANNING AND REBUILDING FOR THE NEW LONDON

There is a unique opportunity to combine public service with the highest possible professional standards for architects, architect/planners, structural engineers, building, quantity and planning surveyors, in the Architect's Department of the London County Council.

District Surveyors' Service—Structural engineers and building surveyors needed.

Modernisation, Adaptation, Rehabilitation—Architects and building surveyors needed.

New Building Programme—Architects and assistants needed to work on housing, schools, South Bank Development, hostels, old people's homes and architectural works associated with road improvements.

Planning of London—Architect/Planners and planning surveyors needed. Development Plan, Development Control and Civic Design, including redevelopment arising from new Roads programme.

Structural Engineering Division—Structural engineers needed for design.

Quantities Division—Quantity surveyors, surveyors for cost planning and workers-up needed.

Voluntary Schools Section—Architectural assistants and building surveyors needed for work on church schools including the initiation of schemes, improvements and maintenance.

Building Regulation Division—Architects and building surveyors needed to examine applications to build, to deal with factory fire arrangements and to help with a campaign to eliminate the danger spots in London where fire risk is high.

Have you thought of joining the L.C.C.?

Whatever changes may result from the Royal Commission Report an enormous programme of work will have to be done and service with the L.C.C. now provides the best training ground for opportunities in the future.

■ Promotion strictly on merit ■ Flexible salary reviews within grades ■ Permanency after probationary service ■ Recognition grants for outstanding work ■ Starting salaries up to £1,500 according to quality and experience.

Please apply for application forms and further particulars to Hubert Bennett, F.R.I.B.A., Architect to the Council, County Hall, S.E.1, quoting reference EK 1278/5.

CORPORATION OF LONDON

The following posts in the Building and Architectural section of the City Surveyor's Office are vacant:—

A. ARCHITECTURAL OR SURVEYING ASSISTANT

Candidates must have passed at least intermediate R.I.B.A. or R.I.C.S., possess a sound knowledge of building construction and the ability to prepare detailed one-eighth scale drawings.

Salary range £990—£1,195

B. JUNIOR ARCHITECTURAL OR SURVEYING ASSISTANT

Applicants should be studying for intermediate examination R.I.B.A. or R.I.C.S. and should possess a sound knowledge of building construction.

Salary scale £630—£990

Write, giving age and full details of previous experience with names of two referees, within seven days, to **THE CITY SURVEYOR, GUILDHALL, E.C.2.**

NEWCASTLE UPON TYNE
CITY AND COUNTY.

CITY ARCHITECT'S DEPARTMENT.

A unique opportunity exists in this office for competent ARCHITECTS to take part in one of the most ambitious programmes of varied building works in the country, and vacancies in the establishment occur for ARCHITECTS who will be considered on their ability in design, experience, and architectural outlook, in the following grades:

J.N.C. "C": £1,560-£1,825 per annum.
J.N.C. "B": £1,410-£1,670 per annum.
A.P.T. V: £1,310-£1,480 per annum.
A.P.T. IV: £1,140-£1,300 per annum.
A.P.T. III: £960-£1,140 per annum.
A.P.T. II: £815-£960 per annum.
A.P.T. I: £645-£815 per annum.

The Department is engaged upon a wide and varied programme of major redevelopment schemes embracing multi-storey flats, shopping precincts and associated community buildings, one of which schemes is the Scotswood-road Redevelopment Area to rehouse approximately 5,000 people, and which is expected to cost in the region of £12 million.

Planning work has now commenced on the new Education Precinct in the central area, comprising Colleges of Further Education, Art and Industrial Design, Drama, Commerce, and Multi-storey Hostels, which will be the largest development of its kind in the country.

Further projects include: Airport Terminal; Abattoir and Fatstock Market; Vegetable Market; Central Library; and Divisional Police Headquarters, etc., and a varied programme of normal housing development of a stimulating character.

The department is also engaged on the New Town Hall, where an exceptional opportunity is presented for working on a building of some £4 million in value, and being executed in materials of the highest quality.

Architects wishing to take part in one of Britain's most stimulating programmes should apply immediately for further details and forms of application to George Kenyon, A.R.I.B.A., A.M.T.P.I., City Architect, 18 Cloth Market, Newcastle upon Tyne, 1, indicating the grade for which they wish to apply.

JOHN ATKINSON,
Town Clerk.

Town Hall,
Newcastle upon Tyne, 1.

BUCKS
COUNTY COUNCIL.

Applications are invited for the following appointments in the County Architect's Department:—

ASSISTANT ARCHITECT, A.P.T. Grade V, £1,310-£1,480 p.a.;
ASSISTANT ARCHITECT, A.P.T. Grade IV, £1,140-£1,310 p.a.;
FEMALE MACHINE OPERATOR, General Division, £220-£530 p.a.

These appointments are superannuable and subject to medical examination.

A weekly allowance of 25s. and return fare home once every two months may be paid for six months to newly appointed married officers of the Council unable to find accommodation.

Applications, on forms provided, must be returned by MONDAY, 29th MAY, 1961.

F. B. POOLEY,
County Architect.

County Offices,
Aylesbury,
Bucks.

HESTON AND ISLEWORTH
BOROUGH.

APPOINTMENT OF SENIOR ARCHITECTURAL ASSISTANT.

Applications are invited for the permanent appointment of a SENIOR ARCHITECTURAL ASSISTANT in the Borough Engineer and Surveyor's Department. Salary in accordance with A.P.T. Grade IV (£1,140-£1,310, plus London Weighting).

Applicants must have had good experience in architectural design and building work under construction, and, other things being equal, preference will be given to applicants who have passed the examination for Associate R.I.B.A. or hold a University Degree or Diploma in architecture accepted by that Institute.

The Council is unable to assist the successful candidate with housing accommodation.

Applications are to be submitted by 22nd MAY, 1961, on forms to be obtained from and returned to the Borough Engineer and Surveyor, 88 Lampton-road, Hounslow.

D. MATHIESON,
Town Clerk.

Town Hall,
Hounslow,
Middlesex.

FRIERN BARNET
URBAN DISTRICT COUNCIL.

FIRST TECHNICAL ASSISTANT (BUILDING).

Applications for this permanent appointment on Grade A.P.T. V (£1,310-£1,480 plus London Weighting) are invited from persons who are Corporate Members of the Royal Institution of Chartered Surveyors (Building Sub-Division) or who possess an equivalent qualification by examination. Applicants must have had good general experience in the preparation and supervision of contracts for the erection of new houses and flats including site layouts and ground work quantities. Some experience in external design preferred but not essential.

Housing may be available if required, and a casual user car allowance (not exceeding 10 h.p. rate) will be payable.

Five-day week now being introduced.

Applications, stating age, experience, qualifications, details of present and previous appointments, and the names of two referees, to be sent to the Engineer and Surveyor, Town Hall, N.11, by 19th MAY, 1961.

R. S. CLOTHIER,
Clerk of the Council.

NEWCASTLE
REGIONAL HOSPITAL BOARD.

EXPANSION OF ARCHITECTURAL DEPARTMENT.

P. H. KNIGHTON, M.B.E., A.R.I.B.A., REGIONAL ARCHITECT.
ARCHITECTURAL STAFF.

The Board is at present preparing a 10-years programme containing a large number and variety of major hospital projects. Planning and building is already current on schemes costing about £15,000,000. As the programme includes also a wide range of buildings which are not peculiar to hospitals, good general experience as well as specialist experience may be gained.

Applications are invited for the following (superannuable) posts:

1. SENIOR ASSISTANT ARCHITECT (£1,300 x £60(5)-£1,600).

Open to registered architects with experience in the design and construction of major public buildings. Experience of hospital work desirable but not essential. Assistance with removal-expenses if appointee at present in a lower-graded Health Service post.

2. ASSISTANT ARCHITECT, £905 x £35(1) x £45(6) x £50(2)-£1,310).

Applicants must have passed the R.I.B.A. Final Examination. For registered architects increments can be given above the bottom of the grade in accordance with relevant practical experience.

Qualified but unregistered architects can enter the Architectural Assistant scale at a salary point of £865 per annum with a view to entering the Assistant Architect grade when registered.

3. ARCHITECTURAL ASSISTANTS (£625 x £30(8) x £35(1)-£900).

Inter R.I.B.A. and preferably some practical experience.

4. ARCHITECTURAL DRAUGHTSMEN (£475 x £25(6) x £30(2)-£685).

Three years' previous experience in an architect's drawing office and good draughtsmanship required.

Evening study facilities available at King's College of Durham University in Newcastle.

Details of training, qualifications, experience, present salary, etc., with the names of three referees, should reach the Secretary to the Board, Benfield-road, Newcastle upon Tyne 6, not later than 18th MAY, 1961. Canvassing will disqualify.

CHESTER CITY.

DEPARTMENT OF CITY ENGINEER.
APPOINTMENT OF CLERK OF WORKS.

Applications are invited for the above appointment in connection with the construction of 152 dwellings on the Blacon Camp Site. Salary within the range of Misc. VII, i.e. £825-£880 per annum. Previous experience required. Applications with two testimonials should reach the City Engineer and Surveyor, 49 Northgate-street, Chester, by WEDNESDAY, the 17th MAY, 1961.

WEDNESFIELD
URBAN DISTRICT COUNCIL.

ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the appointment of ARCHITECTURAL ASSISTANT. Salary within A.P.T. Grade III (£960-£1,140 per annum).

Applicants must have a good experience in Architectural design and construction, and preference will be given to those who have passed the intermediate examination of the Royal Institute of British Architects.

Applications must state age, qualifications, previous appointments and details of experience, together with the names and addresses of two referees.

The appointment will be subject to the National Scheme of Conditions of Service, the Local Government Superannuation Acts, the passing of a medical examination, and will be terminated by one month's notice on either side.

Housing accommodation will be made available, if required, and reasonable removal expenses will be paid.

The District is developing rapidly and offers exceptional experience.

Applications for the appointment must reach the undersigned by not later than FRIDAY, 12th MAY, 1961.

J. HENWOOD JONES,
Clerk of the Council.

Council Offices,
Alfred Squire-road,
Wednesfield,
Staffs.

HARROW
BOROUGH.

Applications are invited for the following appointments in the Borough Engineer's Department:—

(a) BUILDING SURVEYORS, A.P.T. Grades III-IV (*£960 to £1,310 p.a. plus London "Weighting") for works of maintenance and improvements to Municipal properties, including Schools.

Applicants must possess a sound knowledge of building construction and services and have extensive experience of specification writing.

"Casual user" car allowances are provided.

(b) QUANTITY SURVEYING ASSISTANT, A.P.T. Grade III (£960 to £1,140 p.a. plus London "Weighting").

Applicants should have passed the Intermediate Examination of the R.I.C.S. or I.Q.S.

The Council may be able to help with housing accommodation in the light of the applicant's circumstances and a contribution towards removal expenses will be considered.

* NOTE:—Commencing salaries will be in accordance with qualifications and experience, but in the case of appointments (a) applicants will not proceed beyond the maximum of A.P.T. Grade III, unless they possess the appropriate qualification.

The appointments are subject to the Local Government Superannuation Acts; and to the National Joint Council's Scheme of Conditions of Service.

Forms of application may be obtained from me and must be returned, not later than FRIDAY, 19th MAY, 1961.

DAVID PRITCHARD,
Town Clerk.

Town Clerk's Office,
Harrow Weald Lodge,
Harrow,
Middlesex.

PRESTON AND CHORLEY
HOSPITAL MANAGEMENT COMMITTEE.

Applications are invited for the post of WORKS ASSISTANT in the Group Works Department. The duties of the person appointed will include making sample drawings and tracings, assisting in the preparation of specifications and estimates and keeping of records and returns relating to engineering and building matters.

Applications will be considered from young men interested in draughtsmanship, estimating, etc., and who wish to study for the appropriate examinations or from older men who have been associated with the building trades.

The salary scale has a maximum of £690 and the starting point depends on age and experience.

Applications, with names of two referees, to the Group Secretary, Royal Infirmary, Preston.

CANTERBURY CITY.

SENIOR ASSISTANT ARCHITECTS.
Salary range up to £1,480 (max. A.P.T. V).

Applications are invited for ABOVE APPOINTMENTS in City Architect and Planning Officer's Department. Commencing salary according to ability and experience.

Applicants should be qualified and be capable of supervising contracts from commencement to completion, and of co-ordinating the work of all sub-contractors.

The programme of work is varied and interesting, and offers considerable scope for initiative and experience. The successful candidates will be engaged on one of the following: Housing, General Works, Public Buildings, Education.

Housing accommodation available if necessary.

Applications, with the names of two referees, to the City Architect and Planning Officer, Municipal Buildings, Canterbury, by FRIDAY, 26th MAY, 1961.

Canvassing will disqualify.

J. BOYLE,
Town Clerk.

GREENWICH
METROPOLITAN BOROUGH.

APPOINTMENT OF PRINCIPAL ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of a PRINCIPAL ARCHITECTURAL ASSISTANT in the Borough Engineer and Surveyor's Department. Salary grade A.P.T. V (£1,355-£1,525 per annum, including London weighting). Commencing salary in accordance with qualifications and experience.

Candidates should be Registered Architects, preferably Associates of the R.I.B.A., with experience in housing and other municipal projects.

Application forms obtainable from the undersigned, to be returned by NOON on THURSDAY, 18th MAY.

G. C. TURK,
Town Clerk.

Town Hall,
Greenwich, S.E.10.

GLASGOW CITY.

ASSISTANT ARCHITECTS.

The Architectural and Planning Department has a number of vacancies for qualified ASSISTANT ARCHITECTS.

The Department has in hand a large, varied and interesting programme of work, including Comprehensive Redevelopment, Multi-Storey Flats, Schools and Civic Buildings. The work will provide scope for personal initiative in the preparation of designs and details of schemes upon which construction work will follow.

The salary scale for these assistantships is up to £1,560 with placing according to experience.

A five-day week is in operation.

Advances up to 100 per cent of valuation will be made available, where needed, for the purchase of suitable houses in or near Glasgow, by successful applicants.

Form of application may be obtained from the Principal Administrative Officer, 20 Trongate, Glasgow, C.1.

A. G. JURY,
City Architect and Director of Planning.

POPLAR
METROPOLITAN BOROUGH.

ASSISTANT ARCHITECTS (full-time or part-time) required by Poplar Borough Council for immediate appointment. Salary scale A.P.T. III-IV (£960-£1,140 p.a.; £1,140-£1,310 p.a. plus £45 p.a. "weighting"). Commencing salary according to qualifications and experience. Projects include multi-storey flats and maisonettes, etc., in redevelopment areas, and municipal buildings. Application forms from Borough Engineer and Surveyor, Poplar Town Hall, Bow-road, E.3.

GRAVESEND
BOROUGH.

APPOINTMENT OF BUILDING MAINTENANCE ASSISTANT.

Applications are invited for the above APPOINTMENT. The salary will be within A.P.T. Grade III (£960-£1,140) and housing accommodation will be provided if necessary. The successful candidate will be required to pass a medical examination and join the Corporation's Superannuation Scheme.

The Assistant will be required to supervise building maintenance work on all types of Corporation properties, to prepare specifications and estimates for maintenance and minor improvement works to buildings and to check Contractors' accounts for this type of work. He must have a considerable experience in the building industry and of building construction.

Applications accompanied by the names of three referees should be sent not later than TUESDAY, 23rd MAY to Mr. G. E. Hill, B.A., A.M.I.C.E., Borough Engineer and Surveyor, 6 Woodville-terrace, Gravesend.

NORTH-WEST METROPOLITAN
REGIONAL HOSPITAL BOARD.

ARCHITECT'S DEPARTMENT.

ASSISTANT BUILDING SURVEYOR required for work in connection with expanding hospital building programme. A surveyor having good all-round previous experience is required to assist in the management of major building contracts and whose main duties will be the preparation of enquiries in respect of specialist work connected with such contracts.

Applicants must be corporate members of the R.I.C.S. (Building Sub-division). Salary scale £945-£1,360.

Apply, stating age, qualifications (with dates) and experience, with names of two referees, to the Secretary, North-West Metropolitan Regional Hospital Board, 40 Eastbourne-terrace, W.2, by 26th MAY, 1961, quoting ref. 925.

CHELSEA
BOROUGH.

BUILDING SURVEYOR
(A.P.T. III-IV), £960 to £1,310 plus £45 p.a. London "Weighting".

Applications are invited for the above appointment in the Borough Engineer and Surveyor's Department. Applicants must be A.R.I.C.S. (Building) and have had good general experience. Council operates 5-day week. Forms of application from the Borough Engineer and Surveyor, Town Hall, King's-road, S.W.3, to be returned not later than 19th MAY.

ADMINISTRATION OF THE COUNTY OF KENT.

COUNTY ARCHITECT'S DEPARTMENT.

Re-organisation of technical groups in this office affords opportunities for the following:—

Group Working.

Modern Offices.

Large and Varied Programmes.

Architects	£960 to £1,140 £1,140 to £1,310 £1,310 to £1,480
Engineers (Electrical)	£1,140 to £1,310 £1,310 to £1,480
Quantity Surveyors	£1,140 to £1,310 £1,310 to £1,480
Land Surveyors	£960 to £1,140 £1,140 to £1,310
Fittings and Furnishings Designer	£1,140 to £1,310

All applications to be sent, together with particulars of qualifications, experience and salary expected to:—

E. T. Ashley Smith, F.R.I.B.A., County Architect, Springfield, Maidstone, Kent.

now in England

"the screed you need"

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Flooring compounds that give you the finest smoothing and levelling screeds most easily! Save time, labour and material costs.

Mix with water only and apply with a steel float to almost any clean floor surface.

Unaffected by adhesive solvents; its dense surface reduces by 30–40% the amount of costly adhesive required.

Dries within hours.

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DUNLOP BULLDOZER BOOT—really heavy-duty seamless rubber boot for building work, with Resifort sole. Light and flexible. Available with hob nails and digging plates if required. Also at home on the building site: *Workmaster*, sizes 5-11, **45/9d**; *Target*, sizes 6-12, **33/6d**; *Lumber*, laced boots, sizes 5-12, **35/6 or 32/-**.

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FOOTWEAR

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PATENTED MECHANICAL METHOD OF PRODUCING A FINE TEXTURED ROUGHENED SURFACE IDEAL FOR RECEIVING VARIOUS TYPES OF FLOOR TOPPINGS.

* Provides permanent bonding.
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THE METROPOLITAN CONSTRUCTION CO. LTD.
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Photo by courtesy of Guardian Journal Nottingham

Over 25,000 Cowley Levels are in use speeding construction work from site layout to finished building. Efficient and accurate, they soon pay for their cost many times over. The coupon will bring details.

COWLEY LEVEL Automatically gives accurate levels from 6 ins. to over 100 ft. No setting up and no skill required. Accurate within ¼" at 100 ft.

PRICE £20 complete with tripod, staff and target. Leather case for instrument £2.10.0. Full range of accessories available.

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Address SC/1/B

Telephone .....

COWLEY LEVEL DEPT., HILGER & WATTS LTD. 123 CAMBERWELL RD. LONDON, S.E.5. PHONE: RODNEY 5441

MIDDLESEX
COUNTY COUNCIL.

EDUCATION COMMITTEE.
WILLESDEN TECHNICAL COLLEGE.
Denzil-road, Willesden, N.W.10.
Principal: L. L. Allen, B.Sc.(Eng.), A.K.C., M.I.Mech.E., M.I.E.E., M.I.Prod.E.

DEPARTMENT OF ARCHITECTURE AND BUILDING.

Applications are invited for the following posts:

1. LECTURER to teach Mathematics, Science and Structural Engineering up to Higher National Certificate level. Candidates should be graduates or possess an equivalent qualification.

2. LECTURER to teach general Building subjects, including Builders' Quantities, Book-keeping and Surveying up to Higher National Certificate level. Candidates should be graduates or possess an equivalent qualification.

3. ASSISTANT, GRADE B, to teach general Building subjects, including Book-keeping, Building Science and Building Construction up to Ordinary National Certificate level. Candidates should be Licentiates of the Institute of Builders or possess equivalent qualifications.

4. ASSISTANT, GRADE B, to teach Mathematics and Building Science up to Ordinary National Certificate level. Candidates should be graduates or hold equivalent qualifications.

5. ASSISTANT, GRADE B, to teach Plumbing and Sanitation up to the Final City & Guilds standard. Candidates should possess the City & Guilds Full Technological Certificate in Plumbing and have suitable industrial experience.

6. ASSISTANT, GRADE B, to teach Carpentry and Joinery up to the Final City & Guilds standard. Candidates should possess the City & Guilds Full Technological Certificate and have suitable industrial experience.

STRUCTURAL ENGINEERING AND SURVEYORS interested in an academic career will be given every opportunity and encouragement to continue their studies and take an active part in development projects. Continuous contact with industry is encouraged.

Salary within the range:
Lecturer: £1,408-£1,601 per annum.
Assistant Grade B.B.
Graduate: £828-£1,486 per annum.
Non-Graduate: £738-£1,201 per annum.

Further particulars and application forms (foolscap s.a.e.) from the Clerk of the Governing Body, 163 Willesden-lane, N.W.6, to be returned within two weeks.

C. E. GURR, M.Sc., Ph.D.,
Chief Education Officer.

HENDON
BOROUGH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the following appointments:

(a) ARCHITECTURAL TRAINEE, General Division (salary commencing according to age rising by annual increments, at age 18—£370 per annum). Applicants must be qualified to become probationers of the Royal Institute of British Architects (five approved subjects in the G.C.E., including two at "A" level). The successful candidate will be appointed for a term of three years with a three months' probationary period and will be in direct contact with architectural work for Housing, School and Public Building projects.

(b) SENIOR ASSISTANT ARCHITECT, permanent post Grade A.P.T. V (£1,310 to £1,480 plus London Weighting £45).

Applicants must be Associate Members of the Royal Institute of British Architects. The person appointed will be directly responsible to the Chief Assistant Architect, with opportunity for suitable applicants to act as Group Leaders. Previous experience in school work, housing and redevelopment, or civic buildings, will be an advantage.

National Scheme. Medical examination. Appointments terminable by one month's notice on either side.

Applications stating age, education, qualifications, experience, present appointment and salary, together with the names and addresses of two referees, must reach the Borough Engineer and Surveyor, Town Hall, Hendon, N.W.4, by 29th MAY, 1961. Canvassing will disqualify.

R. H. WILLIAMS,
Town Clerk.

Town Hall,
Hendon,
N.W.4.

SOUTH SHIELDS
COUNTY BOROUGH.

BOROUGH ENGINEER'S DEPARTMENT.

Applications are invited for the appointment of SENIOR PRINCIPAL ASSISTANT QUANTITY SURVEYOR in accordance with J.N.C. Scale A up to £1,565 according to experience.

Applicants must have passed the Final Examination (Quantity Surveying Section) of the Royal Institution of Chartered Surveyors.

Housing accommodation will be made available to successful applicants if necessary and they will be required to pass a medical examination for Superannuation purposes.

Application forms are obtainable from the Borough Engineer, Town Hall, South Shields, and should be returned to him not later than 10 a.m., 5th JUNE, 1961.

R. S. YOUNG,
Town Clerk.

BEDFORD
BOROUGH.

Applications are invited for the following posts in the Architect's Section of the Borough Engineer's Department.

(a) THREE SENIOR ASSISTANT ARCHITECTS, A.P.T. IV to V, £1,140-£1,480.

(b) TWO ASSISTANT ARCHITECTS, A.P.T. II to III, £815-£1,140.

In the case of (a) applicants must be Associates of the R.I.B.A. and the conditions of this appointment include the payment of a car allowance of £115 per annum.

Housing accommodation will be offered to all successful applicants and a contribution towards removal expenses will be made. Commencing salary will depend on qualifications and previous experience.

The present programme of capital works include new primary and secondary schools, new municipal offices, multi-storey flats, shops and houses.

The office is run on a group system and opportunity is given to all assistants to have experience on varying works undertaken.

Further particulars and application form may be obtained from the undersigned to whom completed forms should be returned not later than noon on WEDNESDAY, 24th MAY, 1961.

F. W. DAWKES,
Borough Engineer and Surveyor.

Borough Engineer and Surveyor.
Newnham House,
Horne-lane,
Bedford.

WARWICKSHIRE
COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.
APPOINTMENT OF GROUP ARCHITECT, GRADE "C," £1,560-£1,825.

Applications are invited from qualified and experienced ARCHITECTS for the appointment of a GROUP ARCHITECT for Educational projects. The post is one of responsibility requiring a high standard of design ability in all forms of construction. Experience in the organisation and day-to-day running of a group dealing with large projects is essential.

The Council have schemes for the payment of removal expenses and a lodging allowance to married officers. Five-day week worked.

Application forms and full conditions applicable to the appointment can be obtained from Eric Davies, F.R.I.B.A., A.M.T.P.I., County Architect, Shire Hall, Warwick.

L. EDGAR STEPHENS,
Clerk of the Council.

Shire Hall,
Warwick.
May, 1961.

BRIERLEY HILL
URBAN DISTRICT COUNCIL.

APPOINTMENT OF ARCHITECTURAL ASSISTANTS.

Applications are invited for the following:

ARCHITECTURAL ASSISTANT. Salary within A.P.T. Grades II and III (£815-£1,140 per annum).

ARCHITECTURAL ASSISTANT. Salary within A.P.T. Grades I and II (£645-£960 per annum).

Applicants should be experienced in the management of Building Contracts, the preparation of designs, working drawings for Housing and other architectural works. Projects in hand include Civic Centre development and a Public Baths scheme.

Housing accommodation if required.

Applications, stating position applied for, age, full details of qualifications and experience, and accompanied by copies of two recent testimonials, must reach the Clerk of the Council, Civic Buildings, Brierley Hill, Staffs., not later than TUESDAY, 23rd MAY, 1961.

ROMFORD
BOROUGH.

TEMPORARY CLERK OF WORKS (HOUSING).

Applications are invited for the above appointment in the Borough Engineer and Surveyor's Department. Salary within the range £685-£1,000 p.a. A travelling allowance will be paid where necessary. Particulars and Conditions of the appointment may be obtained from the Town Clerk, Town Hall, Romford, to whom completed applications should be sent not later than 22nd MAY.

SPALDING
RURAL DISTRICT COUNCIL.

HOUSING MAINTENANCE ASSISTANT.

Applications are invited for the ABOVE APPOINTMENT. Salary Grade Miscellaneous VI (£760-£825 per annum). Superannuation. Medical examination.

Candidates should have had experience as a general foreman, and preferably be a bricklayer or carpenter, and must be able to drive a motor vehicle provided by the Council.

The duties will consist mainly of the maintenance of 1,800 Council Houses by direct labour, together with improvement work to pre-war houses.

House on rental provided at the Council's Depot.

Applications, in writing, giving details of experience and the names of two referees to the Clerk of the Council, Priory-road, Spalding, by 27th MAY, 1961.

G. S. ASHWORTH,
Clerk of the Council.

WEST RIDING OF YORKSHIRE
COUNTY COUNCIL.

OFFICE OF THE COUNTY ARCHITECT.

Applications are invited for the following appointments. The commencing salary will be fixed at a point within the scale commensurate with qualifications and experience. Five-day week operated.
Central Office, Bishopgarth, Wakefield.

SENIOR ASSISTANT QUANTITY SURVEYOR.
J.N.C. scale "B." Salary range £1,495-£1,670.

Applicants should be Associate Members of the Royal Institution of Chartered Surveyors and have had experience in the preparation of Bills of Quantities, measuring for and adjustment of final accounts and should be capable of taking charge of a section.

ASSISTANT QUANTITY SURVEYOR, A.P.T. IV. Salary range £1,140-£1,310.

Applicants should have had experience in the preparation of Bills of Quantity, measuring for and adjustment of final accounts. Preference will be give to Associate Members of the Royal Institution of Chartered Surveyors.

ASSISTANT ARCHITECTS AND ARCHITECTURAL ASSISTANTS.
A.P.T. V. Salary range £1,310-£1,480.
A.P.T. IV. Salary range £1,140-£1,310.
A.P.T. II. Salary range £815- £960.

Applicants for grades A.P.T. V and A.P.T. IV should be Associate Members of the Royal Institute of British Architects, with a good standard of design ability, and a sound knowledge of modern methods of construction, and be capable of handling building projects from sketch plans to completion.
Doncaster Divisional Office (Ardwick-le-Street).

ARCHITECTURAL ASSISTANT, A.P.T. III. Salary range £960-£1,140.

Applicants should possess a sound knowledge of building construction and be capable of dealing with maintenance works and adaptations to buildings of various types.

Applications to be submitted by the FIRST POST ON TUESDAY, 30th MAY, 1961, on forms to be obtained from and returned to the undersigned.

A. W. GLOVER, F.R.I.B.A.,
County Architect.

Bishopgarth,
Westfield-road,
Wakefield.

BOOTLE
COUNTY BOROUGH.

BOROUGH SURVEYOR'S DEPARTMENT.
(PUBLIC WORKS SECTION.)

Applications are invited for the undermentioned appointments. The Public Works Section carries out work comprising New Buildings, Building Maintenance, Highways, Sewers, Public Cleansing, Street Lighting and Motor Vehicle operation.

(A) DEPUTY WORKS SUPERINTENDENT, A.P.T. Grade III/IV (£960-£1,310 p.a.).

The person appointed in addition to having experience of site organisation and control of men should also have considerable experience of Builders' Quantities and office organisation. He will be responsible to the Works Superintendent for estimating for competitive tendering, valuations of work, cost control and final accounts and the installation and operation of bonus schemes.

The commencing salary will be within the Grade range stated above, depending on qualifications and experience.

(B) ASSISTANT WORKS SUPERINTENDENT, A.P.T. Grade III (£960-£1,140 p.a.).

The person appointed must have had extensive experience in site organisation, operational planning and programming and taking off materials required for large building projects. He will be required to work under the Works Superintendent in conjunction with the various Foremen in effecting maximum supervision of works in progress and initiating new methods of working. He must be experienced in the control of men of all trades and have a good all round knowledge of building trade works.

(C) CHIEF STOREKEEPER, Grade Misc. VI (£760-£825 p.a.).

The person appointed will be responsible to the Works Superintendent for the custody, issue and replenishment of the General Stores including building and electrical trades and for maintaining Stores Records, etc. He should be fully experienced in stores organisation and in the duties involved.

Application Forms from the Borough Surveyor, Town Hall, Bootle, 20, Lancs., are returnable by MONDAY, 5th JUNE, 1961.

HAROLD PARTINGTON,
Town Clerk.

FLINTSHIRE
COUNTY COUNCIL.

SURVEYING ASSISTANT required in the County Architect's Department for work in connection with surveying and levelling of building sites and the surveying of property in connection with the Council's varied building programme. Applicants must have sound practical experience of the surveying of land and building, including the use of a theodolite, and be familiar with current legislation relating to the acquisition of land. Salary A.P.T. I (£645-£815 per annum). Application form from the Clerk of the County Council, County Buildings (P.O. Box No. 1), Mold. Closing date 19th MAY, 1961.

CUMBERNAULD DEVELOPMENT CORPORATION
MEASURING SURVEYOR
(Ref. M.S.2)

Scale APT. III (£960-£1,140 per annum)
Must have wide experience of remeasuring and recording measurements on major building contracts based on the Scottish Mode of Measurement.
The Chief Quantity Surveyor is a member of the R.I.C.S., and the office is recognised for examination purposes.
Housing provided if required. Five day week.
Application forms, which should be returned completed **NOT LATER THAN Wednesday, 7th June, 1961,** may be obtained from the **General Manager, Cumbernauld Development Corporation, Cumbernauld House, Cumbernauld, Glasgow.**

DEWSBURY
COUNTY BOROUGH.

BOROUGH ARCHITECT AND BUILDINGS SURVEYOR'S DEPARTMENT.

Applications are invited for the following appointments within the scope of the grades stated:—

(a) ARCHITECTURAL ASSISTANT (Housing and General Section)—A.P.T. Grade III (£960-£1,140 p.a.).

(b) ARCHITECTURAL ASSISTANT (Education Section)—A.P.T. Grade I (£645-£815 p.a.).

The provision of housing accommodation will be considered if required.

The appointments will be subject to one month's notice on either side and to the provisions of the Local Government Superannuation Acts.

Applications stating age, education, qualifications, full particulars of training and experience, together with copies of two recent testimonials, should be sent to the undersigned not later than WEDNESDAY, 31st MAY, 1961, in envelopes endorsed "Appointment of . . . ."

A. NORMAN JAMES,
Town Clerk.

Town Hall,
Dewsbury.
4th May, 1961.

HUNTINGDONSHIRE.
COUNTY ARCHITECT'S DEPARTMENT.

TECHNICAL ASSISTANT (ELECTRICAL ENGINEER).

Applications are invited for the above appointment on Grade A.P.T. III (£960-£1,140), or Grade A.P.T. IV (£1,140-£1,310) according to qualifications.

The person appointed will be a member of the Engineering Section of the Department, and his duties will consist of all works connected with electrical installations related to both small and large building projects. Preference will be given to candidates studying for or actually holding the A.M.I.E.E. and the person appointed can anticipate work in connection with major electrical installations.

Application forms may be obtained from the County Architect, County Buildings, Huntingdon, and completetd forms should be returned to the undersigned by MONDAY, 29th MAY, 1961.

A. C. AYLWARD,
Clerk of the County Council.

County Buildings,
Huntingdon.

DEWSBURY
COUNTY BOROUGH.

APPOINTMENT OF BOROUGH ARCHITECT AND BUILDINGS SURVEYOR.

Applications are invited from members of the Royal Institute of British Architects for the appointment of BOROUGH ARCHITECT AND BUILDINGS SURVEYOR at the commencing salary of £2,025 rising by annual increments of £75 to £2,325, with a car allowance of £112 6s. per annum. Housing accommodation will be made available for the successful applicant if required.

Further particulars and conditions of appointment can be obtained from the undersigned by whom applications must be received not later than the 27th MAY, 1961.

A. NORMAN JAMES,
Town Clerk.

Town Hall,
Dewsbury.
3rd May, 1961.

HERTFORDSHIRE

HERTFORDSHIRE COLLEGE OF BUILDING.
Hatfield-road, St. Albans.

Required for September, 1961:—

ASSISTANT LECTURER to teach mainly Bookkeeping and Management Studies in the General Building Course up to H.N.C. Endorsement Level. Applicants should be members of the Institute of Builders. Salary: Burnham Scale, Grade B (£700 by £27 10s. 0d. to £1,150 p.a.).

Responsibility allowance of £120 may be paid to suitably qualified applicant.

Applicants should write to the Head of the College of Building, 29 Hatfield-road, St. Albans, as early as possible, giving personal details, qualifications, industrial and teaching experience.

Company Meeting

Taylor Woodrow Limited

The Twenty-sixth Annual General Meeting of Taylor Woodrow Limited will be held in London on June 6. The following is an extract from the Statement by the Chairman, Mr. Frank Taylor, which has been circulated with the Report and Accounts for the year ended December 31, 1960:

The trading results for the year ended December 31, 1960, are lower than those for the previous year and this position is in the main attributable to the unfavourable weather conditions experienced on building and civil engineering sites in the United Kingdom during the year, coupled with continuing intensive competition which adversely affected profit margins.

Overseas, too, international competition for suitable contracts is particularly intense.

In previous Statements I have frequently stressed the necessity for judging the results of a Building and Civil Engineering business such as ours over a number of years rather than a single year and I wish to emphasise this point once again when you are considering the results for the year.

Accounts

The accounts show the profits for 1960 after taxation at £446,003 compared with £702,812 for 1959. The turnover of the Group for 1960 (not including associated companies) was £33½ million compared with £29½ million in 1959.

The Directors recommend a final dividend be paid for the year of 7½d. per share on the Ordinary issued capital which is the same as the previous year.

At Home

Building and Civil Engineering

Taylor Woodrow Construction Limited: The year under review has not been an easy one for building and civil engineering work at home. A reduction in profits despite increased turnover reflects the unfavourable weather conditions which persisted throughout the year.

A highlight of the year was the success of the tender which, in association with English Electric and Babcock and Wilcox, we submitted for the 580,000 kW. Atomic Power Station at Sizewell in Suffolk. The Station is planned to be in operation in 1966. In conjunction with our Partners, designs and tenders are being prepared for further atomic power stations for both home and overseas customers.

Our hydro-electric project at Cwm Rheidol has been dogged by extremely adverse physical conditions, but the fact that the whole of the works will nevertheless be completed on schedule reflects great credit on all concerned. Our roadworks on the A1 at Wentbridge are making good progress, and the striking new viaduct which dominates the scheme will be opened to public traffic before the winter.

The volume of our opencast coal production during the 12 months of 1960 was reduced owing to the National Coal Board's general restriction on output, but I am glad to report that this restriction has been lifted in 1961 so that we are now producing the quantities envisaged by our contracts.

Myton Limited

During the year a number of important contracts were completed including two multi-storey office blocks in the City of London, Austral House and Kempson House, and progress was made on other substantial office developments under construction in the City. Good progress was also made with our Zidpark Automatic Multi-Storey Garage adjoining Southwark Bridge and this has attracted great interest. A number of multi-storey Corporation Flats were completed in North-East England and we continue the successful development of private housing estates.

House Building

As a result of the shortage and consequent high cost of building land, the inflationary trend in house purchase prices has continued over the past year.

Although Town Planning Authorities have taken certain steps to increase densities in some areas, it does not appear that the appropriate Planning Authorities have yet recognised the urgent necessity of releasing more land for housing development.

Arcon Export and Home

1960 brought the anticipated improvement in business forecast twelve months ago. Export orders obtained from Overseas customers during 1960 showed a 50 per cent increase over 1959 in terms of superficial area of structures to be shipped, but continuing competition restricted Profit margins

We entered 1961 with a substantial volume of Export business in hand and further orders of significant value have since been obtained with more in prospect.

Overseas

Australia: Trading conditions during the past year in Australia have proved difficult and the introduction of new credit restrictions has intensified the competition for suitable contracts.

Canada: Our contracting company has obtained further contracts during the year and these are progressing favourably.

The property investment and development Company—Monarch Investments Limited—made a profit for the year ending December 31, 1960, after taxation, of $109,453.

West Africa: Our associated companies jointly owned by The United Africa Company Limited and your Company in Nigeria, Ghana and Sierra Leone, made profits despite increasing international competition in all these territories.

Turnkey Contracts

In my statement last year I referred to Turnkey Contracts in the United Kingdom with an all-in service for buildings of various types. I am pleased to report that we have a substantial amount of work of this character on hand at the present time, an example of which is a new £1½ million factory. Many of our Clients favour the Turnkey form of contract and it is anticipated that we shall succeed to expand this side of our business during 1961.

Company Meeting

Josiah Parkes & Sons

(Manufacturers of Union Locks and Brassfoundry)

CONTINUED PROGRESS

FULL CURRENT ORDER BOOK

The Ordinary Annual General Meeting of Josiah Parkes & Sons Limited was held on May 5 at Willenhall, Mr. C. W. Parkes, J.P. (Chairman and Joint Managing Director) presiding.

The following is an extract from his circulated statement:

The accounts shew a rise in profits before tax of 7 per cent over the previous year's figure, which does indicate continued progress by the company. Turnover shewed a greater rise than this, but profit margins were again narrower, and costs are still rising in almost every direction.

Parent Company: The intake of orders was maintained throughout the year at a very high level for both home and export trade. Although stretched to the limit of capacity the factories were not able to cope fully with all the demands made on them, so that we ended the year with a considerably heavier load of orders on hand. In the autumn we experienced a fall in the demand from the motor trade but we were able to transfer the resources so released on to other work, without any appreciable effect on our total output.

Edwin Showell & Sons Ltd.: A very large increase in turnover created an unprecedented demand on factory capacity and brought with it many problems and difficulties. Much effort has been devoted to methods of increasing rapidly the rate of production, which are now shewing results, but in the interim it was impossible to maintain the standard of service to customers that we regard as desirable and normal. The company earned a profit during the year, but less than was expected, and action has now been taken which it is hoped will result in an improvement in the earnings ratio.

Josiah Parkes & Sons (South Africa) Ltd.: Despite the widely reported political problems of South Africa, this company enjoyed a very successful year, both as regards turnover and earnings.

Buildings and Plant

Additions to Land and Buildings during the year cost £40,386, involving developments at each of the factories in the group. An extension of the Portobello, Willenhall factory was completed and brought fully into use during the year, and further extensions are now planned to provide improved warehousing and despatch facilities. Additional land adjoining the South African factory has been bought to provide for future extensions. The construction of a new bay to provide improved warehouse and despatch facilities at Stirchley has been approved and is now under construction.

Total expenditure on new plant and equipment amounted to £75,922 against a provision of £48,651 for depreciation, indicating a continued expansion of capacity. Both plant and buildings have been maintained at a high standard of efficiency.

Accounts

The group trading profit for the year was £360,158, compared with £336,447 in the previous year, an increase of £23,711 or 7 per cent. Due to the increase in the rate of Profits Tax, the total taxation provision in these accounts requires approximately 46 per cent of earnings against 44 per cent in the previous year, and net available profit after tax shews an increase of only £7,400 over 1959.

The proposed final dividend of 11 per cent, with the interim dividend paid of 4 per cent, will make a total distribution of 15 per cent for the year, which is a small increase over the previous year.

Outlook for 1961

We have again started the year with a very full order book, and all the indicators suggest continuation of a high level of demand. It seems that the building and constructional industries will be very active for some years ahead, not only in the UK, but in most countries of the world, and this will involve a continued big demand for hardware. The motor trade recession last year appears to have been only temporary. There seems every likelihood therefore, of maintaining, or even increasing, turnover.

As I said last year however, the difficult problem is the continual rise in costs. To the extent that they are not matched by higher output, they must sooner or later be reflected in increased selling prices, with a tendency to weaken our competitive position in overseas trade. It is now well recognised that exports are an essential element in the country's economy, and they are equally important in the economy of this company. So far and as long as possible we try to absorb these cost increases but there are limits to the extent that this can be done.

Once again therefore, I must temper optimism regarding the future with the recognition of the possibility of yet more reductions in profit margins.

The report was adopted.

WILLESDEN
BOROUGH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the following appointments in the Building Surveyor's Section:

(a) GENERAL ASSISTANTS (2 posts) within Grade A.P.T. II (£815-£960 p.a.).

(b) GENERAL ASSISTANT within Grade A.P.T. I (£645-£815 p.a.).

London Weighting is payable in addition to both above salaries.

Applicants should have passed the Intermediate Examination of the Royal Institution of Chartered Surveyors or equivalent and have had experience in the general work of a Building Surveyor's Office and the administration of Building By-laws and the Town Planning Acts. For one of the (a) posts experience of dealing with the control of advertisements will be an advantage.

The Council are unable to assist with housing accommodation.

Details and form of application obtainable from the Borough Engineer, Town Hall, Dyne-road, Kilburn, N.W.6, and must be returned by 10 a.m. on MONDAY, 29th MAY, 1961.

R. S. FORSTER,
Town Clerk.

BEDFORD
BOROUGH.

Applications are invited for the appointment of a

CLERK OF WORKS

for the supervision of building contracts. Commencing salary, which will depend on qualifications and previous experience, will be not less than £815 per annum and will rise to a maximum of £960 per annum.

The present programme of capital work includes new primary and secondary schools, new municipal offices, houses, multi-storey flats and shops.

Forms of application may be obtained from the undersigned to whom applications should be returned not later than NOON on WEDNESDAY, 24th MAY, 1961.

F. W. DAWKES,
Borough Engineer and Surveyor.
Newnham House,
Horne-lane,
Bedford.

KIRKCALDY
CORPORATION.

There are the undernoted vacancies:—BURGH ENGINEER'S DEPARTMENT.

(a) ASSISTANT ARCHITECT/PLANNER. Must be associate member of the R.I.B.A., qualified or experienced in Town Planning, able to prepare neighbourhood and site layouts including central area redevelopment. Salary scale £875 x £50 to £1,325, with placing according to age and experience.

(b) ASSISTANT ARCHITECT. Must be A.R.I.B.A., with ability to supervise and control large scale contracts. Salary scale £875 x £50 to £1,325, with placing according to age and experience.

Housing accommodation available. Posts pensionable; medical examination. Canvassing direct or indirect disqualifies. Declare relationship to member of Council or chief official. Applications, stating age, details of training, qualifications and experience, with names and addresses of two referees, to the Burgh Engineer and Planning Officer, Town House, Kirkcaldy, by 26th MAY, 1961.

HARROW
BOROUGH.

Applications are invited for appointments on the Architectural Staff of the Borough Engineer's Department which is engaged on a varied programme of municipal building schemes, including minor works to schools and is also responsible for all building maintenance.

(a) DEPUTY CHIEF ASSISTANT ARCHITECT, J.N.C. "B" (£1,417-£1,670 p.a.). Must be fully qualified and experienced in the organisation and direction of such works.

(b) PRINCIPAL ARCHITECTURAL ASSISTANT, A.P.T. V (£1,310-£1,480 p.a. plus London "Weighting").

Must be fully qualified and experienced to act as a group leader in the design and execution of new building works.

(c) SENIOR TECHNICAL ASSISTANT, A.P.T. IV (£1,140-£1,310 p.a. plus London "Weighting").

Must be suitably qualified and will assist in school maintenance works.

(d) ARCHITECTURAL ASSISTANT, A.P.T. III/IV* (£960-£1,310 p.a. plus London "Weighting").

*Note: Commencing salaries will be in accordance with qualifications and experience, but in the case of appointment (d), applicants will not proceed beyond the maximum of A.P.T. III until fully qualified.

The Council may be able to help with housing accommodation in the light of the applicant's circumstances. A contribution towards removal expenses will be considered.

The appointments are subject to the Local Government Superannuation Acts and to the appropriate National Schemes of Conditions of Service.

Forms of application may be obtained from me and must be returned not later than FRIDAY, 26th MAY, 1961.

DAVID PRITCHARD,
Town Clerk.

Town Clerk's Office,
Harrow Weald Lodge
Harrow.

OXFORD CITY.

CITY ARCHITECT AND PLANNING OFFICER'S DEPARTMENT.

Applications are invited for the following posts:—

SENIOR ARCHITECTURAL ASSISTANT, A.P.T. Grade V (£1,310-£1,480); ARCHITECTURAL ASSISTANT, A.P.T. Grade III/IV (£960-£1,140) (£1,140-£1,310).

Suitable housing accommodation, if required, will be provided by the Council for the above posts.

Applicants must be Members of the Royal Institute of British Architects, should have several years' experience and possess a wide knowledge of modern methods of construction and contract procedure and must be capable of carrying through contracts from sketch stage to completion with minimum supervision. A high standard of design ability and a keen interest in contemporary architecture are essential. Assistants are encouraged to control their own contracts from sketch design onwards. The Senior Architectural Assistant will be engaged mainly on educational work in the first instance.

The appointments will be subject to the National Conditions of Service and the successful candidates will be required to pass a medical examination.

Application forms to be obtained from the City Architect and Planning Officer, Town Hall, Oxford. Closing date 26th MAY, 1961.

HARRY PLOWMAN,
Town Clerk.

Town Hall,
Oxford.

LONDON
COUNTY COUNCIL.

AN OPPORTUNITY TO TEACH TECHNICAL SUBJECTS IN SECONDARY SCHOOLS.

The London County Council will be pleased to consider applications for salaried appointments in its teaching service from men wishing to teach woodwork, metalwork, technical drawing or engineering subjects. To meet in particular the needs of men in industry with no teacher training and little or no teaching experience a full-time residential course (two weeks commencing on 4th September, 1961, and a further week in December), has been arranged at Shoreditch Training College, Coopers Hill, Englefield Green, Egham, Surrey. Accepted candidates for appointment will be paid from the beginning of the course. Burnham Scale (£558-£1,051 including London allowance), commencing salary will depend on qualifications and experience. Qualifications needed are Higher National Diploma with at least two years' industrial experience or Higher National Certificate or an appropriate Full Technological Certificate of City and Guilds of London Institute with at least five years' experience. The cost of board and lodging for the course is expected to be £18, half of which will be refunded together with reasonable travelling expenses, on satisfactory completion of the course. For further particulars and application form send a stamped addressed foolscap envelope to Education Officer (TS.1/B/1151/5), County Hall, Westminster Bridge, S.E.1, immediately.

BERMONDSEY
METROPOLITAN BOROUGH.

Applications are invited from persons under 51 years of age for the following temporary appointments:—

SENIOR ASSISTANT ARCHITECT required for about two years to design a Public Baths and later to lead a small group in the preparation of working drawings and specifications. Applicants must be qualified by examination as Associates of the R.I.B.A. Salary up to £1,565 per annum according to qualifications and experience.

ASSISTANT in Architect's Section. Applicants must have passed intermediate examination of R.I.B.A. or R.I.C.S. and have experience in surveying old housing properties and preparing conversion and improvement schemes. Salary at a point in A.P.T. III or IV (£960-£1,310) plus London Weighting according to experience.

Applications for both appointments should be addressed to Borough Engineer and Surveyor, Municipal Offices, Spa-road, S.E.16.

CORBY
DEVELOPMENT CORPORATION.

CLERK OF WORKS,
ESTATES DEPARTMENT.

Applications are invited for a post as MAINTENANCE CLERK OF WORKS (HOUSING) in the Estates Department. The salary will be within the New Towns A.P.T. Grade II (£815 to £960) and subject to deduction for Superannuation under the Local Government Superannuation Scheme. Housing available. Removal expenses paid.

Applicants are expected to have a sound knowledge of all building trades, and be experienced in the inspection of house property and the preparation of specifications.

Applications, stating age, qualifications, training and experience, present appointment and salary, and previous appointmets, together with the names of two referees, must reach the undersigned by MONDAY, the 22nd MAY, 1961.

R. F. BROOKS GRUNDY,
General Manager.
Corby Development Corporation.
Spencer House,
Corby,
Northants.

NEW FOREST
RURAL DISTRICT COUNCIL.

SENIOR SURVEYING ASSISTANT, Grade A.P.T. IV.

Applications are invited for the appointment of a SENIOR SURVEYING ASSISTANT, for duties in connection with Improvement Grants. Salary within A.P.T. IV, £1,140-£1,310. Essential user travelling allowance up to 10 h.p. The Council will assist with housing accommodation if required.

Applicants must be Chartered Surveyors with good experience of building construction and estimating.

The appointment will be subject to N.J.C. Conditions, Superannuation Acts, Medical Examination and one month's notice on either side.

Applications, stating age, qualifications, details of experience, the names and addresses of three referees, to be sent to Mr. A. Rock, A.M.I.C.E., M.I.Mun.E., Engineer and Surveyor, Council Offices, Lyndhurst, Hants, by not later than TUESDAY, 23rd MAY, 1961.

F. R. APPLEBY,
Clerk of the Council.

Council Offices,
Lyndhurst,
Hants.
5th May, 1961.

ROCHDALE
COUNTY BOROUGH.

INSPECTOR OF BUILDINGS.

Applications are invited for the above appointment in the Borough Engineer and Surveyor's Department at a salary in accordance with Miscellaneous Grade IX (£940-£1,005 per annum).

The appointment involves the supervision of major housing contracts and applicants should have a thorough knowledge of the building trade.

Assistance with Housing Accommodation may be made available in appropriate cases.

Applications, stating age, qualifications, present and previous appointments and experience, together with the names of two referees, to the Borough Engineer and Surveyor by 31st MAY, 1961.

Canvassing will disqualify, relationship to any member or senior official of the Council must be disclosed. Appointments subject to medical examination.

K. B. MOORE,
Town Clerk.

Town Hall,
Rochdale.
3rd May, 1961.

GRIMSBY
COUNTY BOROUGH.

BOROUGH ENGINEER AND ARCHITECT'S DEPARTMENT.
SENIOR QUANTITY SURVEYOR.

Applications are invited for the appointment of a SENIOR QUANTITY SURVEYOR on the permanent staff, Grade A.P.T. IV, commencing salary £1,140 rising to £1,310 per annum.

The appointment is subject to the Conditions of Service of the National Joint Council, terminable by one month's notice on either side, and to the provisions of the Local Government Superannuation Acts. The successful candidate will be required to pass a medical examination.

Housing accommodation for a married person will be available if required.

Applications, stating age, qualifications, present and past appointments and details of experience, together with the names and addresses of two referees, must be delivered to the undersigned not later than FIRST POST on MONDAY, the 29th MAY, 1961.

J. V. OLDFIELD, M.Inst.C.E.,
Borough Engineer and Architect.
Municipal Offices,
Town Hall Square,
Grimsby.
May, 1961.

WALTHAM HOLY CROSS
URBAN DISTRICT COUNCIL.

ARCHITECTURAL ASSISTANT FOR CAPITAL WORKS.

Applications are invited for an ARCHITECTURAL ASSISTANT in the Department of the Engineer and Surveyor. Preference will be given to candidates with housing experience.

The salary will be within the National Scale, Special Grade (£840 to £1,145) plus London Weighting; commencing salary according to qualifications and experience. Applicants must be Associate Members of the R.I.B.A. and/or Registered Architects. Normal conditions of service apply. Housing accommodation will be provided if necessary.

Applications, stating age, with full particulars of qualifications and experience, together with the names and addresses of two persons to whom reference may be made, should be sent to the undersigned not later than NOON on WEDNESDAY, 17th MAY.

ROLAND E. SMITH,
Clerk of the Council.

Town Hall,
Waltham Abbey.
4th May, 1961.

SURREY
COUNTY COUNCIL.

Applications invited for CLERK OF WORKS on major building projects and maintenance. Salary range £16 19s. 2d.-£21 4s. p.w. according to ability and experience. Must have been properly trained as craftsmen. Application Forms from County Architect, County Hall, Kingston, to be returned to him by 26th MAY, 1961.

WAKEFIELD CITY.

CITY ENGINEER'S DEPARTMENT.

Applications are invited for the following superannuable appointments:

(a) ASSISTANT ARCHITECT, Grade A.P.T. III (£960-£1,140 p.a.).

Applicants must be A.R.I.B.A. and preference will be given to those having municipal experience. The commencing salary will be according to qualifications and experience.

(b) ASSISTANT QUANTITY SURVEYOR, Grade A.P.T. III (£960-£1,140 p.a.).

Candidates must be members by examination of the R.I.C.S. or I.Q.S. and preference will be given to those having experience in Local Authority, Housing, Schools and other Municipal projects. The commencing salary will be according to qualifications and experience.

HOUSING ACCOMMODATION WILL BE PROVIDED IF NECESSARY.

A 5-day week is in operation.

Applications stating age, qualifications and experience together with the names of two referees to be sent to the City Engineer, Town Hall, Wakefield, by the 31st MAY, 1961.

NOTTINGHAM
NO. 4 HOSPITAL MANAGEMENT COMMITTEE.

SAXONDALE HOSPITAL,
RADCLIFFE-ON-TRENT,
NOTTINGHAM.
WORKS ASSISTANT.

Applications are invited for the above post in the Group Building Supervisor's Office. Applicants should have building experience either as an architectural student or as a trained craftsman and should be in possession of or studying for the O.N.C. and/or City and Guilds Certificate.

This post offers excellent experience and opportunities for someone desirous of obtaining a higher post in this section of Hospital service.

Salary at age 26 or above £590 x £25 (4) £690 per annum. The commencing salary is abated by £25 per annum for each year under age 26.

Applications, stating age, qualifications, experience, together with the names and addresses of two referees, should be sent to the Group Secretary from whom further particulars of the post may be obtained.

STAFFORDSHIRE
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.
APPOINTMENT OF ASSISTANT STRUCTURAL ENGINEER.

Applications are invited for the above POST within Grade A.P.T. IV (£1,140-£1,310 per annum). Applicants should be Chartered Structural Engineers and have good experience in the design of structures in steelwork, reinforced concrete and structural timber.

Good working conditions, assistance with removal expenses, etc. The Council has a scheme for loans to employees wishing to purchase their own houses.

Forms of application from P. Woodcock, F.R.I.B.A., County Architect, Green Hall, Lichfield-road, Stafford.

Applications must be received WITHIN 10 DAYS of the appearance of this advertisement.

T. H. EVANS,
Clerk of the County Council.

LONDON
COUNTY COUNCIL.

ARCHITECT'S DEPARTMENT.
VOLUNTARY SCHOOLS SECTION.

ARCHITECTS, Grade III, £830-£1,250.

ARCHITECTURAL ASSISTANTS, £720-£960.

BUILDING SURVEYORS, £720-£960.

The work of this section consists of technical examination at all stages of all development proposals for 400 Church schools, Grammar schools and Polytechnics and the preparation of schemes and carrying out building works in connection with school meals accommodation, schoolkeepers' houses and buildings at playing fields. Architects and Architectural Assistants with some knowledge of school planning are required for this work.

The section is also responsible for maintenance works at these schools for which Building Surveyors with experience in maintenance works are required.

Starting salary for all appointments in accordance with qualifications and experience.

Form and particulars from Hubert Bennett, F.R.I.B.A., Architect to the Council (EK/B/1226/5), County Hall, S.E.1.

SURREY
EDUCATION COMMITTEE.

GUILDFORD COUNTY TECHNICAL COLLEGE,
STOKE PARK, GUILDFORD.

Required 1st SEPTEMBER, 1961, ASSISTANT, GRADE A, to teach principally Brickwork and ancillary subjects. Ability to assist with general work of Department an advantage. Minimum qualifications Final C. & G. Certificate, and good industrial experience. Salary Scale, £520 x £27 10s (16) x £40(1)-£1,000. Increments for industrial and training experience.

Further particulars and application from Principal on receipt of S.A.E.

CHESTERFIELD
RURAL DISTRICT COUNCIL.

PUBLIC WORKS DEPARTMENT.
APPOINTMENT OF GENERAL FOREMAN (BUILDING).

Applications are invited for the ABOVE APPOINTMENT from persons having practical knowledge of the building trade, experience in the erection of new buildings, mainly housing, the maintenance of records and the control and organisation of labour. Salary £685-£760 p.a. (Misc. Grade V.)

Appointment is subject to N.J.C. conditions, superannuation, medical examination, and one month's notice on either side. Assistance in housing in appropriate cases.

Applications endorsed "General Foreman," stating age, qualifications, experience, present and past appointments, and present salary, together with the names and addresses of two persons from whom references may be obtained, must reach the undersigned by 23rd MAY, 1961.

H. O. HAWKINS,
Clerk of the Council.

Rural Council House,
Saltergate,
Chesterfield.

LAMBETH
METROPOLITAN BOROUGH.

SENIOR ASSISTANT ARCHITECT, HOUSING DEPARTMENT.

Applications are invited for the position of SENIOR ASSISTANT ARCHITECT. Applicants must hold the diploma of the Royal Institute of British Architects, or equivalent, and have experience in housing design, conversions, etc. Salary within the scale of £1,310 per annum to £1,480 per annum, plus London weighting. Application form from Town Clerk, Lambeth Town Hall, Brixton, S.W.2 (quote IIIc0). Closing date 27th MAY.

LECTURER IN BUILDING SUBJECTS

Required at the Cambridgeshire Technical College and School of Art, to teach Construction and Surveying subjects in Ordinary and Higher National Certificate courses, and to be responsible for the development of courses to prepare students for professional examinations in Surveying. Applicants should be Professional Associates of the R.I.C.S. (Quantities or Building sections) or Associates of the Institute of Builders.

Salary scale: £1,370 x £35-£1,550.

Further particulars and application forms from the Principal, Cambridgeshire Technical College and School of Art, Collier-road, Cambridge.

BUILDING SURVEYOR.

A BUILDING SURVEYOR is required in the Building and Property Maintenance Department of the NORTH THAMES GAS BOARD, FULHAM, S.W.6.

Candidates should be able to design and prepare plans and specifications of new and alteration works for offices, showrooms, warehouses and depots.

Successful candidate could, if suitably qualified, expect a salary in the region of £1,000 to £1,200 per annum. There is a contributory staff pension scheme.

Applications, giving full details, should be sent to the Staff Controller, North Thames Gas Board, 30 Kensington Church-street, W.8, WITHIN 10 DAYS of the publication of this advertisement, quoting reference TB/67.

STOCKGROVE PARK
SCHOOL,
NR. LEIGHTON BUZZARD, BEDS.

SENIOR HOUSEFATHER (resident) required for supervisory duties at boarding school for difficult senior backward boys. Experience in work with boys essential. Ability in simple handwork desirable. £621 x £20-£661 according to experience plus £30 for C.T.C. certificate. Excellent single accommodation, board and laundry £138. Forms from Education Officer (Estab.6/B/1128/5), County Hall, London, S.E.1.

SALFORD CITY.

Applications are invited for the appointment of a BUILDING INSPECTOR (MORTGAGES), A.P.T. II (£815-£960), in the Department of the City Engineer and Surveyor (G. A. McWilliam B.Sc., A.M.I.C.E., A.R.I.C.S., M.I.Mun.E.). The commencing salary will be dependent upon qualifications and experience.

Applicants should have a sound experience in the administration of Building Byelaws, Public Health Acts and the duties will include the inspection of properties on which the Corporation have granted mortgages.

A five-day week is in operation. Housing accommodation may be provided in an approved case.

Applications stating age, education, qualifications and details of experience, together with the names and addresses of two referees, should be sent to the City Engineer and Surveyor, Town Hall, Salford 3, Lancs, to arrive by WEDNESDAY, 24th MAY, 1961.

HERTFORDSHIRE
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

ASSISTANT BUILDING SURVEYORS, A.P.T. I/II (£640-£815; £815-£960), required at Divisional Education offices at Watford and Hitchin and in the maintenance section at County Hall.

Candidates should have a sound knowledge of all Building trades and be competent to prepare reports and specifications for the maintenance of buildings and to supervise such work.

The post offers the opportunity of practical experience in Building Surveying for those preparing for the examinations of the R.I.C.S. "an essential." Car allowances are payable. Commencing salary according to experience and ability.

Application forms from Geoffrey Fardell, M.B.E., A.R.I.B.A., County Architect, County Hall, Hertford, to whom they should be returned by MONDAY, 29th MAY, 1961.

CARPENTRY AND JOINERY.

ASSISTANT LECTURER, GRADE A, required at the Cambridgeshire Technical College and School of Art, to teach CARPENTRY AND JOINERY and to develop Woodcutting Machinists' work. Candidates must have a Final City and Guilds qualification in Carpentry and Joinery, and good experience on the site and in the workshop, including the Woodcutting Machine shop. Some teaching experience, a Final City and Guilds Certificate in Woodcutting Machinists' Work, and/or a Full Technological Certificate would all be advantages.

Salary scale £520 x £27 10s.-£1,000, with additional allowances for training and a degree. Starting point on scale depends on previous experience.

Further particulars and forms of application from the Principal, Cambridgeshire Technical College and School of Art, Collier-road, Cambridge.

GREAT YARMOUTH
COUNTY BOROUGH.

SCHOOLS ARCHITECT'S DEPARTMENT.

Applications are invited from Associate Members of the R.I.B.A. for the appointment of MINOR WORKS ARCHITECT at a salary within A.P.T. IV, £1,140 to £1,310 per annum. A car allowance of £135 per annum is also payable.

The successful applicant will be required to take charge of the Minor Works Section.

Assistance with removal expenses may be made in suitable cases.

Full details of present and past appointments, age, qualifications and experience, together with the names of two referees, should reach the Schools Architect, 22 Euston-road, Great Yarmouth, by 24th MAY, 1961.

D. G. FARROW,
Chief Education Officer.

22 Euston-road,
Great Yarmouth.

BRIGHTON
COUNTY BOROUGH.

ASSISTANT BUILDING INSPECTOR.

Applications are invited for the appointment of an ASSISTANT BUILDING INSPECTOR in the Borough Surveyor's Department, Grade A.P.T. II, £815-£960.

Applicants must hold the Building Inspector's Certificate of the Institution of Municipal Engineers, or its equivalent, have a sound knowledge of building construction and considerable experience in the administration of building byelaws and relevant Acts.

The Corporation will refund 50 per cent. of the successful candidate's removal expenses.

Application forms may be obtained from D. J. Howe, M.I.C.E., M.I.Mun.E., Borough Surveyor, Engineer and Planning Officer, and must be returned to him at 26-30 King's-road, Brighton, Sussex, by NOON on WEDNESDAY, the 31st MAY, 1961.

W. O. DODD,
Town Clerk.

4th May, 1961.

WEST HAM
COUNTY BOROUGH.

A vacancy exists for a GROUP ARCHITECT in the Borough Architect and Planning Officer's Department, J.N.C. Scale "B"—£1,485-£1,670 p.a., plus essential car allowance.

There are also a number of vacancies for SENIOR ASSISTANT ARCHITECTS, J.N.C. Scale "A"—£1,400-£1,565 p.a., and for ARCHITECTURAL ASSISTANTS, A.P.T. Grade IV-V—£1,140-£1,480 p.a., plus London Allowance.

An expanded programme of work, including numerous official buildings, Fire Stations, Primary and Secondary Schools, high density housing, and Town Centre Redevelopment Scheme, is on hand.

Applications, with details of qualifications and experience (together with names of two referees), to be addressed to the Borough Architect and Planning Officer, 70 West Ham-lane, Stratford, E.15, by 30th MAY, 1961.

LANCASHIRE
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

SENIOR ASSISTANT ARCHITECTS (N.J.C. Scale "B," £1,505-£1,670).

Applications are invited from experienced ARCHITECTS for posts on the permanent staff. The County Council has a large and extremely varied building programme, and posts will be filled by men of initiative, imagination and a flair for sensitive design.

Applicants are expected to be Registered Architects, as well as Associates of the Royal Institute of British Architects and, if appointed, will be able to claim a disturbance allowance up to a maximum of £125, a facility offered by the County Council to cover the expenses of removal and other associated costs.

Application forms and conditions of appointment are obtainable from the County Architect, P.O. Box 26, County Hall, Preston, returnable by the 26th MAY, 1961.

WILLESDEN
BOROUGH.

Applications are invited for the appointments in the Building Works Section of the Borough Engineer's Department:

TWO TECHNICAL ASSISTANTS. Salary within Grade A.P.T. II (£815-£960 p.a.) plus London Weighting.

There is no age limit but candidates for one of the posts should have had experience in bonus surveying for new buildings, including measurement and agreeing targets, and for the other post experience in estimating for maintenance repairs and conversions.

Full details and application forms obtainable from the Borough Engineer, Town Hall, Dyne-road, Kilburn, N.W.6, to be returned by 10 a.m. on MONDAY, 29th MAY, 1961.

(Signed) R. S. FORSTER,
Town Clerk.

ENFIELD
BOROUGH.

BOROUGH ENGINEER AND SURVEYOR'S DEPARTMENT.

Applications are invited for the following permanent appointments (5-day week):

ENGINEERING ASSISTANT, A.P.T. I.

ENGINEERING ASSISTANT, A.P.T. II-III.

ARCHITECTURAL ASSISTANTS, A.P.T. III and A.P.T. IV.

SENIOR PLANNING ASSISTANT, A.P.T. III.

Details of appointments and application forms obtainable from the Borough Engineer and Surveyor, 7 Little Park Gardens, Enfield.

CYRIL E. C. R. PLATTEN,
Town Clerk.

Civic Centre,
Enfield.

CHELMSFORD
CORPORATION.

The following vacancy exists in a progressive and rapidly growing county town. The capital estimates for the year include schemes which will cost some £3 million and staff are encouraged to accept responsibility.

JUNIOR ARCHITECTURAL ASSISTANT, A.P.T. II-III, £815-£1,140.

Half approved removal expenses offered; commencing salary will depend upon qualifications and experience.

For further particulars write to Borough Engineer, Municipal Offices, Coval-lane, Chelmsford. Closing date 24th MAY, 1961.

B. A. FRANCIS,
Town Clerk.

MANCHESTER CITY.

CLERK OF WORKS (TEMPORARY) required in City Architect's Department to supervise the construction and fitting of school furniture. Salary A.P.T. II, £815 to £960 per annum. Five-day week. Removal expenses allowed. Forms of Application from City Architect, P.O. Box 488, Town Hall. Returnable by 23rd MAY.

HUYTON-WITH-ROBY
URBAN DISTRICT COUNCIL.
(Population—63,000.)

Applications are invited for the appointment of a CHIEF ASSISTANT ARCHITECT at a salary in accordance with N.J.C.-A.P.T. V, £1,310 to £1,480.

Candidates must be Associates of the Royal Institute of British Architects. They should have considerable experience in the design of public buildings and handling technical administration.

Housing accommodation will be provided if required.

Applications, stating age, present position, salary and date of appointment, details of experience and previous appointments, with dates, together with names and addresses of two referees, to reach R. T. Chappelle, A.R.I.B.A., Architect and Housing Director, "Grasscroft," Archway Road, Huyton, by WEDNESDAY, 24th MAY, 1961.

D. WILLGOOSE,
Clerk of the Council.

Council Offices,
Derby-road,
Huyton.

HAMMERSMITH
BOROUGH.

ARCHITECTURAL APPOINTMENTS.

ASSISTANT ARCHITECT (A.P.T. V, £1,355-£1,525 p.a.). Applicants must be A.R.I.B.A. or hold equivalent qualification.

ARCHITECTURAL ASSISTANTS (A.P.T. IV, £1,185-£1,355 p.a.). Intermediate R.I.B.A. essential. Preference will be given to applicants who have passed Part 1 or 2 of the R.I.B.A. final examination or have satisfactorily completed a course at a school of architecture.

DRAUGHTSMAN OR TRACER (male or female). Starting salary according to age, G.C.E. qualification and experience, between £515 and £615 p.a. at 22 and rising to £820 p.a. if suitably qualified.

The Department is engaged in varied and interesting works, including multi-storey flats in tall blocks, public buildings and depots.

Application forms for these appointments (returnable by 22nd MAY) from Town Clerk, Town Hall, Hammersmith, W.6.

LANCASHIRE
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.
GROUP LEADER QUANTITY SURVEYOR.
N.J.C. Scale "C" (£1,560-£1,825).

Applications are invited from experienced QUANTITY SURVEYORS for the appointment of a GROUP LEADER QUANTITY SURVEYOR on the permanent staff.

Applicants should be Chartered Quantity Surveyors, and the duties of the post include the organisation of the work within the Group, which embraces all stages from Estimates to Final Accounts.

The person appointed will be able to claim a disturbance allowance up to a maximum of £125, a facility offered by the County Council to cover the expenses of removal and other associated costs.

Application forms and conditions of appointment are obtainable from the County Architect, P.O. Box 26, County Hall, Preston, returnable by the 20th JUNE, 1961.

LANCASTER CITY.

APPOINTMENT OF CITY ARCHITECT.

Applications are invited for the ABOVE APPOINTMENT. Salary Scale £2,170 x four increments of £75—£2,470. This is the maximum salary scale within the Joint Negotiating Committee's Scales.

Applicants must be Corporate members of the Royal Institute of British Architects and preferably also of the Town Planning Institute.

This is a first appointment of a Chief Officer for the Architectural Department, and the Council are seeking a person of wide experience of architectural design. Experience of central area redevelopment will be of great value.

Further particulars and conditions of appointment are obtainable from the undersigned.

Last date for receipt of applications 26th MAY, 1961.

J. D. WADDELL,
Town Clerk.

Town Hall,
Lancaster.
3rd May, 1961.

WEST HAM
COUNTY BOROUGH.

Applications invited for position of CHIEF ASSISTANT PLANNING OFFICER, J.N.C. Scale "C"—£1,560-£1,825 p.a., plus essential car allowance. Applicants should hold a recognised qualification in Town Planning and preferably an associated professional qualification and should be experienced in all aspects of urban planning, including statutory requirements of a Local Planning Authority. A vast quantity of redevelopment work is in hand leading to urban renewal schemes and town centre redevelopment proposals.

An ASSISTANT PLANNING OFFICER, A.P.T. IV—£1,140-£1,310 p.a., plus London Allowance, and a PLANNING ASSISTANT, A.P.T. I-III—£645-£1,140 p.a., plus London allowance, are also required, and suitably qualified applicants are invited to apply.

Applications, stating age, qualifications and experience (together with names of two referees), to be addressed to the Borough Architect and Planning Officer, 70 West Ham-lane, Stratford, E.15, by 30th MAY, 1961.

MIDDLESEX
COUNTY COUNCIL.

EDUCATION DEPARTMENT.

LABORATORY STEWARD required at Tottenham Technical College, High-road, N.15, for Building Science and Testing Laboratories of Department of Technology. Should possess O.N.C. (Building) or equivalent. Senior post providing experience for prospective teachers. Some evening duty. Facilities for continued study. Salary Misc. IV, £625-£685 plus London Weighting of up to £40. Application forms (s.a.e.) from Principal, above address, returnable by 8th JUNE. (Quote G.248 B.)

LANCASHIRE
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.
ASSISTANT ARCHITECTS, A.P.T. V (£1,310-£1,480).
(Starting salary according to experience.)

Applications are invited from qualified ARCHITECTS of initiative, keen on design and modern constructural methods, to work on a large and varied programme.

If appointed, applicants will be able to claim a disturbance allowance up to a maximum of £125, a facility offered by the County Council to cover the expenses of removal and other associated costs.

Application forms and details of appointment obtainable from the County Architect, P.O. Box 26, County Hall, Preston, returnable by 26th MAY, 1961.

LEYTON
BOROUGH
(in the County of Essex).

APPOINTMENT OF JUNIOR ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of JUNIOR ARCHITECTURAL ASSISTANT, Grade A.P.T. I, £645-£815 per annum plus London Weighting. The successful applicant will be employed by the Essex County Council and will work in the School Architect's Section of the Borough Engineer and Surveyor's Department, Town Hall, Leyton, E.10. Five-day week is operated.

Details and form of application from the Borough Education Officer, Education Offices, Kirkdale-road, Leytonstone, E.11, to whom they should be returned within 14 days from the appearance of this advertisement.

LANCASHIRE
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.
ASSISTANT ARCHITECTS, A.P.T. IV (£1,140-£1,310).
(Starting salary according to experience.)

Applications are invited from qualified ARCHITECTS of initiative, keen on design and modern constructural methods, to work on a large and varied programme.

If appointed, applicants will be able to claim a disturbance allowance up to a maximum of £125, a facility offered by the County Council to cover the expenses of removal and other associated costs.

Application forms and details of appointment obtainable from the County Architect, P.O. Box 26, County Hall, Preston, returnable by 26th MAY, 1961.

CANTERBURY CITY.

Applications are invited for the appointment of a BUILDINGS MAINTENANCE SURVEYOR within A.P.T. III (£960-£1,140). Applicants with the final qualification of the R.I.C.S. (Building) will be given preference. The person appointed will be required to prepare annual estimates, repair programme specifications and to supervise all maintenance and minor alteration works to Council properties including Schools, Public Buildings and Housing, etc.

Housing accommodation will be provided if necessary.

Applications, stating age, qualifications, experience and the names of two referees, should be forwarded to the City Architect, Municipal Buildings, Canterbury, by 20th MAY, 1961.

Canvassing will disqualify.

J. BOYLE,
Town Clerk.

KING'S COLLEGE HOSPITAL.
Denmark Hill, S.E.5.

Applications are invited for the post of ASSISTANT BUILDING SURVEYOR in the Building Surveyor's Department at a salary of £615 x £20-£675 per annum.

Applicants should be experienced in the preparation of plans of existing buildings and working drawings for alterations and improvements. Preference will be given to applicants who have passed the Intermediate Examination of the R.I.C.S. (Building Sub-Division).

Applications stating age, experience, training and qualifications should be sent to the undersigned by 26th MAY, 1961.

J. D. BANKS,
House Governor.

LANCASHIRE
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.
ARCHITECTURAL ASSISTANTS (within the salary range £645-£960 according to experience and ability).

Applications are invited from ARCHITECTURAL ASSISTANTS for appointments to the permanent staff of the County Architect's Department, which is engaged on a large and varied programme of major projects.

Applicants should have attained Intermediate R.I.B.A. standard and should have a reasonably varied experience.

Application forms and details of appointment obtainable from the County Architect, P.O. Box 26, County Hall, Preston, should be returned by 26th MAY.

SALFORD
EDUCATION COMMITTEE.

A TECHNICAL ASSISTANT is required in the School Buildings Section, with sound practical experience of building trades and competence to inspect property, prepare estimates and reports on repairs and adaptation work. Ability to draw minor works plans and the possession of a recognised qualification or Higher National Certificate in Building would be advantageous. Salary: A.P.T. I, £645-£815.

The post is superannuable. A five-day week is in operation. Application forms are obtainable from the Director of Education, Education Office, Chapel-street, Salford, 3, and should be returned as soon as possible after the publication of this advertisement.

CHISLEHURST AND SIDCUP
URBAN DISTRICT COUNCIL.

ENGINEER AND SURVEYOR'S DEPARTMENT.
BUILDING INSPECTOR.

Applications invited for above permanent post on Grade A.P.T. II (£815-£960) plus London weighting.

Applicants should hold Building Inspector's Certificate of Institution of Municipal Engineers, or equivalent, and a knowledge of Town Planning will be an advantage.

Applications, stating age, qualifications and experience, with names of two referees, must be received by the undersigned not later than MONDAY, 29th MAY, 1961.

T. W. FAGG,
Clerk of the Council.

Council Offices,
Sidcup-place,
Sidcup,
Kent.

MIDDLESEX
COUNTY COUNCIL.

COUNTY ENGINEER'S DEPARTMENT.

TECHNICAL ASSISTANT (A.P.T. III/IV, £1,005-£1,355) required in Entertainments Licensing Section at Hendon Central. Commencing salary according to qualifications and experience. Required to carry out certain inspection duties outside office hours for which £110 p.a. is paid. Car allowance. Should be Assoc. Member of R.I.C.S. (qualified in Building Sub-Division), or possess equivalent qualification and have had experience in carrying out structural surveys, preparation of plans and drawing and supervision of building works in progress. 5-day week. Prescribed conditions. Application forms from County Engineer, Middlesex House, 20 Vauxhall Bridge-road, S.W.1, returnable immediately. (Quote G251B.)

LEYTON
BOROUGH
(in the County of Essex).

COMMITTEE FOR EDUCATION.
APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the permanent appointment of ARCHITECTURAL ASSISTANT, Grade A.P.T. III, £960-£1,140 per annum, plus London Weighting. The successful applicant will be employed by the Essex County Council and will work in the School Architect's Section of the Borough Engineer and Surveyor's Department, Town Hall, Leyton, E.10. Five-day week is operated.

Details and forms of application from the Borough Education Officer, Education Offices, Kirkdale-road, Leytonstone, E.11, to whom they should be returned within fourteen days from the appearance of this advertisement.

BOLTON
COUNTY BOROUGH.

BUILDING WORKS DEPARTMENT.
BONUS SURVEYOR.

Applications are invited for the above appointment. Salary Grade A.P.T. II (£815-£960).

Candidates must have a sound knowledge of building construction and have had considerable experience in estimating and incentive bonus schemes in connection with the maintenance of housing properties and public buildings.

Preference given to applicants holding appropriate technical qualifications.

Applications, naming two referees, to be received by the Town Clerk not later than 20th MAY.

EAST HAM
COUNTY BOROUGH.

ARCHITECTURAL ASSISTANTS, A.P.T. I OR II.
Salary up to £1,000 per annum (according to qualifications).

Subsistence allowances may be granted over a reasonable period to the persons appointed if unable to obtain suitable housing accommodation, necessitating the maintenance of two homes.

Further details and application forms returnable by 26th MAY, 1961, from the Town Clerk, Town Hall, E.6.

EAST HAM
COUNTY BOROUGH.

SENIOR ASSISTANT ARCHITECT, A.P.T. IV, £1,185-£1,355.

Salary in excess of the minimum may be paid according to qualifications and experience. A subsistence allowance may be granted over a reasonable period to the person appointed if unable to obtain suitable housing accommodation, necessitating the maintenance of two homes.

Further details and application forms, returnable by 26th MAY, 1961, from the Town Clerk, Town Hall, E.6.

HOVE
BOROUGH.

SENIOR ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of SENIOR ARCHITECTURAL ASSISTANT in the Borough Engineer and Surveyor's Department at a salary in accordance with Grade A.P.T. IV (£1,140 to £1,310).

Candidates should have a general experience including the preparation of drawings and specifications and should have passed the Final Examination of the Royal Institute of British Architects or equivalent. One month's notice is required on either side.

Consideration will be given to the provision of housing accommodation if required.

Applications stating age, training, qualifications, present and previous appointments and experience, together with the names and addresses of two referees should be delivered to the Borough Engineer and Surveyor, Town Hall, Hove, 3, by SATURDAY, 20th MAY, 1961.

STAFFORDSHIRE
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of a TEMPORARY CLERK OF WORKS from persons having wide experience in the building trade.

The successful candidate will be required to supervise the erection of various schemes in the Southern Area of the County.

Salary: 15 Guineas per week.

Forms of application, which must be returned by the 24th MAY, 1961, may be obtained from the County Architect, Green Hall, Lichfield-road, Stafford.

T. H. EVANS,
Clerk of the County Council.

RICHMOND (SURREY)
BOROUGH.

TECHNICAL ASSISTANT required for duties under Clean Air Act 1956 (Smoke Control Areas): Salary £855-£1,000 per annum; superannuation scheme; knowledge of building construction essential (Clerk of Works, or equal qualification preferred).

Applications in writing to Medical Officer of Health, Public Health Department, Parkshot, Richmond, Surrey, not later than the 27th MAY, 1961.

CLIFFORD HEYWORTH,
Town Clerk.

Town Hall,
Richmond,
Surrey.

CHESTERFIELD
RURAL DISTRICT COUNCIL.

APPOINTMENT OF CLERK OF WORKS, A.P.T. I (£645-£815).

Applications are invited for the above appointment from candidates with suitable experience in Civil Engineering and/or Building Work.

Housing accommodation will be provided in appropriate cases and removal expenses will be paid. Essential User car allowance on Scale I.

Application with the names of two referees to reach the undersigned by 23rd MAY, 1961.

H. O. HAWKINS,
Clerk of the Council.

Rural Council House,
Saltergate,
Chesterfield.

WEST SUFFOLK
COUNTY COUNCIL.

COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the post of ASSISTANT ARCHITECT within Grade A.P.T. IV-V (£1,140-£1,480 per annum).

Applicants must be qualified Architects and preferably have experience in Local Authority work.

The department offers varied and interesting experience on Educational, Police and Health programmes.

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A five-day week is in operation; housing accommodation may be made available.

Application forms obtainable from the County Architect, 13 Westgate-street, Bury St. Edmunds, to be returned as soon as possible.

WEST HAM
COUNTY BOROUGH.

BONUS MEASURING ASSISTANT required, with at least 5 years' approved experience in measuring building works in all trades for incentive bonus.

Salary within the range of £760-£825 p.a., plus London Allowance £25/£40 p.a. according to age.

Applications in writing, giving full particulars of experience, age, etc., should be addressed to the Borough Engineer and Surveyor, West Ham Town Hall, Stratford, E.15, immediately.

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Application forms, returnable by 27th MAY, 1961, from the Water Engineer, 55 Dale-street, Liverpool, 2.

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Applications to the Director of Recruitment, Ghana High Commission, 248 Tottenham Court-road, London, W.1.

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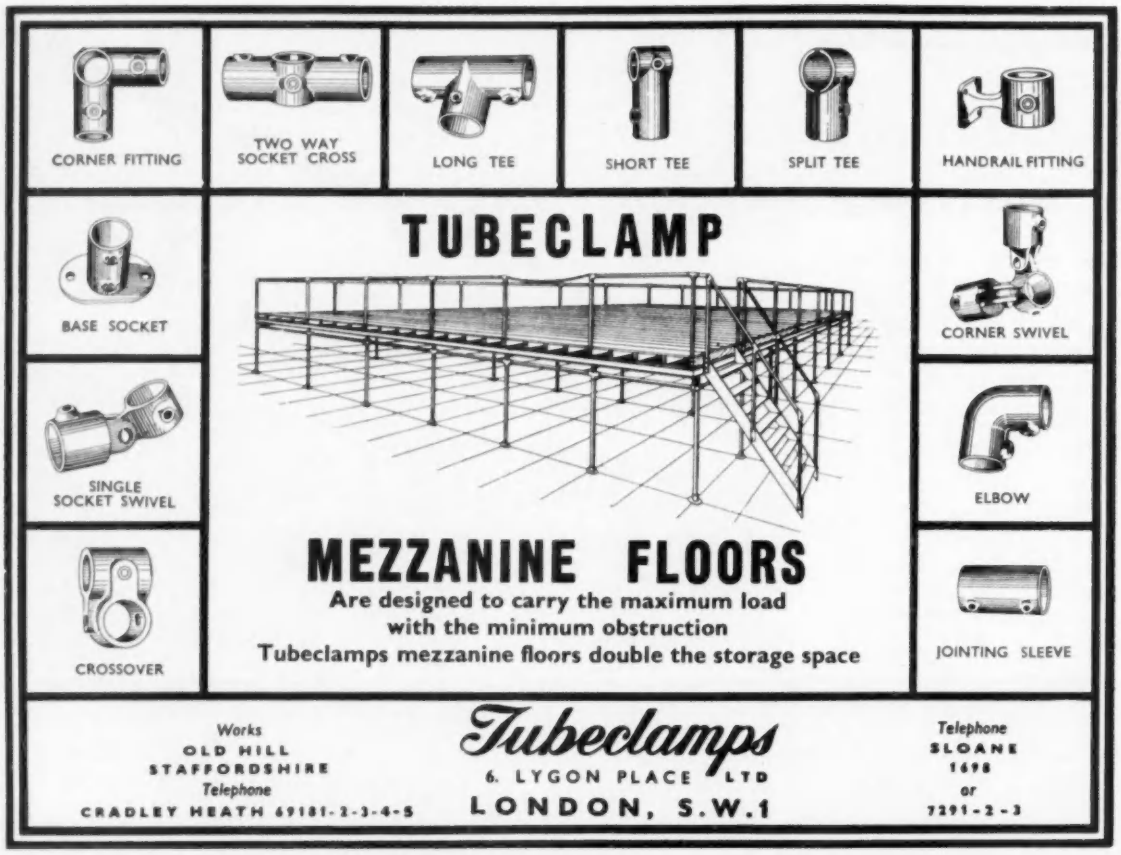

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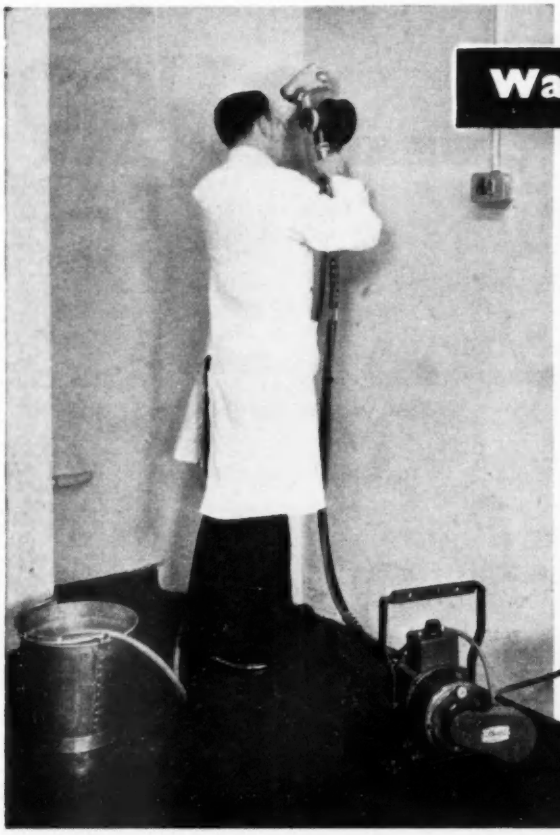

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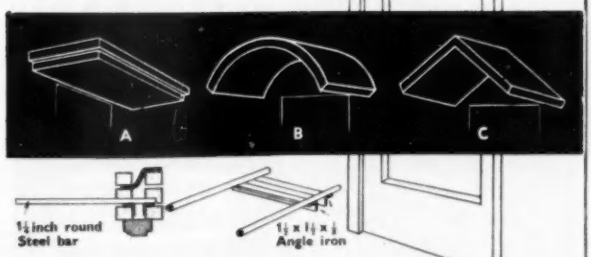

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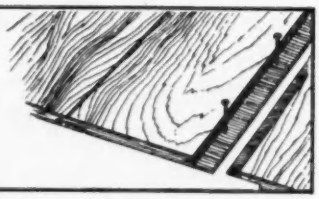

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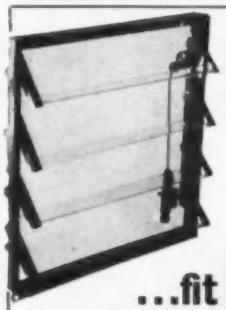

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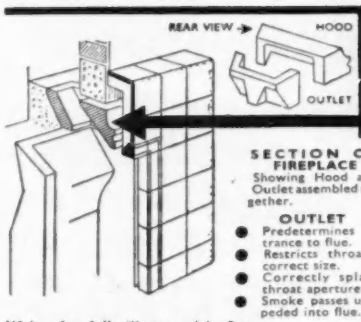

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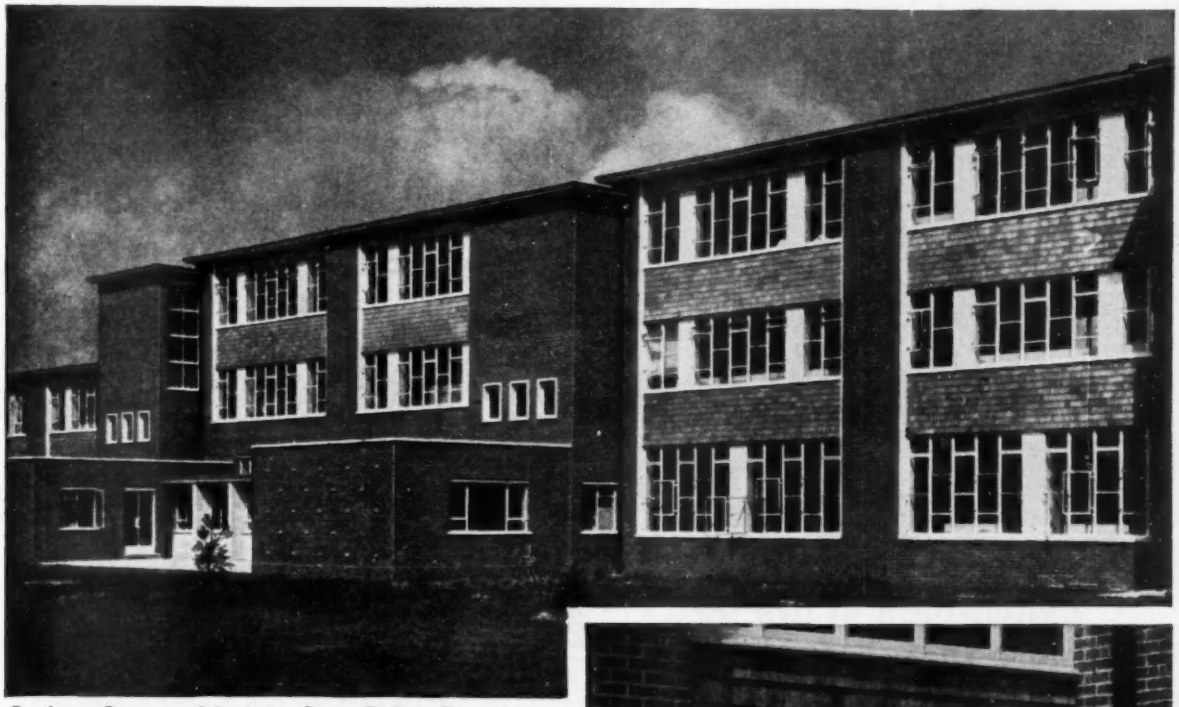

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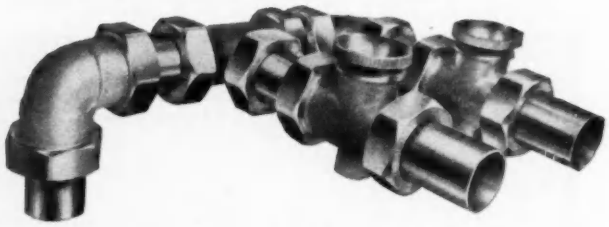

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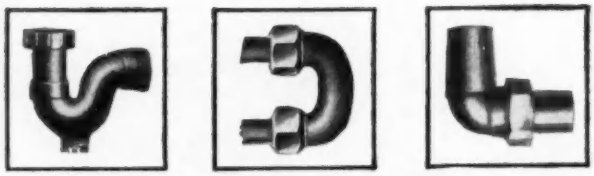

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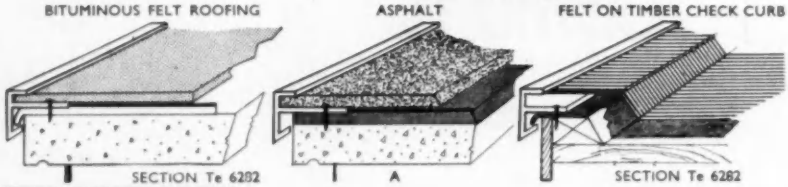

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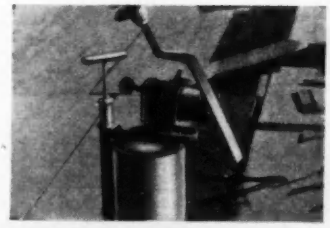

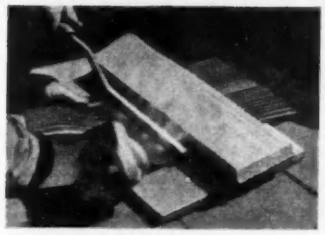

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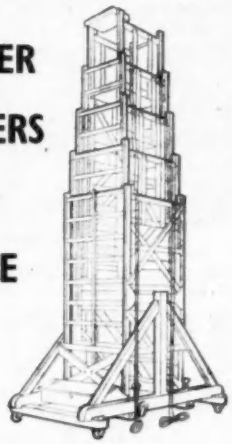

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Assistant

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having a good background in the industry together with the drive and initiative to merit promotion to senior positions are offered opportunities on a variety of interesting contracts in and around the London Area. Apply in writing with full details to:

Chief Quantity Surveyor, (Ref. D.J.B.),
Howard Farrow Ltd.,
Highfield Road, Golders Green, N.W.11.

CHARTERED QUANTITY SURVEYOR Required to take charge of Quantity Surveying side of Architectural Practice. Schools, Hospitals, Domestic and Industrial work. Pension and Bonus schemes in operation. Salary by arrangement.—Reply to FIRTH, SON & BLACKBURN, A./A.R.I.B.A., Broadway House, Crackenedge-lane, Dewsbury.

IMPERIAL CHEMICAL INDUSTRIES, Ltd., Dyestuffs Division, has a vacancy in Manchester for a QUANTITY SURVEYOR (ASSISTANT) to assist with the preparation of Interim Certificates, Sub-Contracts and Final Accounts, for Industrial, Office and amenity-type buildings. Candidates with a knowledge of preparation of Bills of Quantities and Cost Estimates are preferred and some contracting experience is desirable. Applications giving brief details of experience and qualifications should be made to Staff Department, Hexagon House, Blackley, Manchester, 9.

QUANTITY SURVEYOR/ESTIMATOR Required by medium-sized firm of Building Contractors in the Doncaster area, for work up to the value of £200,000. Applicants must be fully experienced in dealing with enquiries, site measurements, interim payments and Final Accounts. Golden opportunity for advancement and permanent position for competent man. Car provided and accommodation if necessary.—Apply in writing stating age, experience and salary required, to Box 5394, "The Builder."

LONG-ESTABLISHED firm of London (E.C.) Chartered Quantity Surveyors Require qualified ASSISTANTS capable of taking charge of complete jobs with minimum supervision.—Write, stating experience and salary required, Box 5030, "The Builder."

QUANTITY SURVEYOR, experienced taking-off, Interim valuations and Final Accounts. State age, experience, salary.—Apply by letter to C. CORNES & SON, Ltd., 169 Lichfield-street, Hanley, Stoke-on-Trent.

FINAL ACCOUNT SPECIALIST Required for responsible position with London Chartered Quantity Surveyors. Thirty-five hour week, three weeks' holiday.—Write giving details of experience and expected salary range to Box 5385, "The Builder."

JUNIOR QUANTITY SURVEYING ASSISTANT Required, age about 18 years, of good education. Commencing salary £400 p.a. London office.—Box 5431, "The Builder."

QUANTITY SURVEYING ASSISTANT Required for work in the Manchester area. £1,250 p.a. offered.—Box 5432, "The Builder."

QUANTITY SURVEYING ASSISTANT Required for work in the Eastern Counties. £1,250 p.a. offered.—Box 5433, "The Builder."

ASSISTANT QUANTITY SURVEYORS Required, intermediate or final standard in small professional office in Cumberland.—Write giving details of experience and salary required to Box 5408, "The Builder."

ASSISTANT QUANTITY SURVEYOR of about Intermediate standard. Required in small congenial office at Victoria with varied work in hand and to come. Holiday this year and fixed arrangements honoured.—Please write giving useful particulars to Box 5486, "The Builder."

QUANTITY SURVEYOR, qualified A.R.I.C.S., not less than four years. Required by long-established and well-known medium-sized firm of Chartered Quantity Surveyors in London, W.C., district. Must be capable of all usual duties with minimum supervision. Luncheon vouchers, three weeks' holiday, superannuation scheme. Salary according to experience and abilities.—Write, giving details of training and experience, to Box 5442, "The Builder."

LONDON C.Q.S. (staff about 20) Require A.R.I.C.S. as SENIOR ASSISTANT with view to local partnership in branch office either at home or overseas later. Possibility of full partnership ultimately for right man.—Write for application form to Box 5457, "The Builder."

QUANTITY SURVEYORS Required for Building and Civil Engineering contracts in East Anglia. Permanent positions with good prospects and entry into pension scheme after probationary period.—Box 5460, "The Builder."

ASSISTANT QUANTITY SURVEYOR Required by London Chartered Quantity Surveyor. Salary up to £1,500. Pension scheme, five-day week. Write giving age, experience and salary required.—Box 5472, "The Builder."

SURVEYORS

BUILDERS' ESTIMATING SURVEYOR Required near Reading. Experienced in dealing with estimates from enquiry to final account. Must be capable of organising and supervising his own jobs and working on his own initiative.—Reply giving full particulars of experience, references, age and salary required, Box 940, "The Builder."

SITE MEASURING SURVEYOR Required for contracts, 25 miles radius Basingstoke, permanent.—Write, giving full particulars, Box 982, "The Builder."

MEASURING SURVEYOR Required by Quantity Surveyors', Westminster, for work in the London area. Salary according to qualifications and experience and reviewed regularly. Luncheon vouchers, pension scheme.—Apply, stating age and experience, to Box 936, "The Builder."

SURVEYOR Required by London Quantity Surveyors mainly for measuring variations, preparation of interim valuations and final accounts for varied building contracts. Occasional travelling. Salary £900-£1,200 according to ability.—Please write, giving full particulars, to Box 990, "The Builder."

RESIDENT SURVEYOR wanted by London Quantity Surveyors for large contract in North West England, duration about three years. Must be very experienced and thoroughly acquainted with Final Account work. Details of experience, age, and salary required, to Box 993, "The Builder."

SITE MEASURING SURVEYOR Required for contracts Barnet, North London area. Permanent position.—Write details to Box 933, "The Builder."

MEASURING SURVEYOR on W.D. Schedule Required by Chartered Quantity Surveyors (full or part-time).—Apply MESSRS. HARRIS, ROURKE & SIMPSON, City Chambers, 35 Catherine-street, Salisbury, Wilts. Tel.: 4914.

SURVEYOR Required N.W. London experienced in general duties, site measuring, valuations, final accounts. Please state full experience and age.—Box 5156, "The Builder."

SENIOR and JUNIOR MEASURING SURVEYORS Required for work in Norfolk and Suffolk.—Particulars and salary required, to Box 5174, "The Builder."

MEASURING SURVEYOR Required for valuations and final accounts and also for taking-off materials for ordering.—A. T. ROWLEY (LONDON), Ltd., Cambridge Works, Lordship-lane, Tottenham, N.17. TOTtenham 3611.

SITE MEASURING SURVEYOR Required by Quantity Surveyors in South Kensington. Salary com. £800-£900 according to ability. Five-day week. L.V.s. Sliding holiday scale, two weeks this year.—Box 5234, "The Builder."

JUNIOR BUILDING SURVEYOR Required, in early twenties. Must have attained O.N.C or H.N.C. in Building. Good opportunity to learn profession and obtain L.I.O.B.—Write giving details of education, training in builder's office, age and salary required, to R. J. ADAMS, Ltd., 11/12 Finsbury-square, E.C.2.

HUMPHREYS LIMITED

require

BONUS & COST SURVEYORS

for London contracts. Permanent positions based on London office. Experience of major contracts desirable.

Apply in writing stating age, experience, etc. to:

Personnel Department,
HUMPHREYS LIMITED,
199, Knightsbridge,
London, S.W.7.

A. E. A. PROWTING LIMITED

require a

SURVEYOR with considerable estimating experience to take charge of Planning Division together with an

ASSISTANT fully versed in taking off quantities and materials schedules for Housing and Flat developments.

Also required is a

MEASURING SURVEYOR to deal with site measurement on the above type of development in addition to normal Contracts, used to dealing with Sub-contractors of all trades.

All posts are permanent and pensionable after probationary period and the successful applicants will be based at our Head Office.
Salaries by arrangement. Applicants for all posts should be in possession of a Driving Licence.

Apply in writing to:—

Breakspear House, Bury Street, Ruislip, Middx.

LESLIE

& CO. LTD.

REQUIRE A

MEASURING SURVEYOR

to work initially in the East London Area. This permanent position carries an attractive salary, good annual bonus, together with excellent opportunities for advancement. A younger person with site experience would be considered.

Apply in writing giving full details to

Chief Surveyor, Peel Street, Kensington, London, W.8

SURVEYOR

is required by the City Office of

H. FAIRWEATHER & CO. LTD.,

The vacancy will be filled by a man experienced in surveying and negotiating medium sized contracts from commencement to final account, who has initiative and is used to responsibility.

Salary will be related to qualifications and experience.

Modern Offices—alternate Saturdays free—Staff Pension Fund in operation. Present holiday commitments honoured.

Reply to:

Brooks House,
48, Upper Thames Street,
London, E.C.4

stating age, when you are available, and the salary you require.

BUILDING SURVEYOR

(Sub. Div. 3b)

required by well-known ESTATE CO. (Kingston/Sy) to take ENTIRE CHARGE of Department dealing exclusively in NEW DEVELOPMENT of medium-price houses and maisonettes. Must be THOROUGHLY EXPERIENCED, confident and able to advise, control and plan stages of "Virgin Land" to "open-the-front-door". Great opportunity for a live, hardworking member seeking a secure, permanent and pensionable position. Write—

Box No. 5309, "The Builder"

TOKEN CONSTRUCTION COMPANY LTD.

require

MEASURING SURVEYOR

for contracts in the North Midland Area. Knowledge of all trades from initial stages to final account. Position permanent and pensionable. Applicants write, stating age, previous experience and salary required to:— **Personnel Director,**
68, Mount Street, London, W.1

EXPERIENCED SURVEYOR

required.

Sound knowledge of the Industry essential.

This position is permanent, progressive and pensionable with top salary for successful applicant.

Details of experience, etc., to:

Box No. 5354, "The Builder"

SURVEYOR

Croudace Ltd.

an expanding company executing contracts in Southern Counties, have a vacancy in their Contracts Department at Caterham, Surrey, for a man aged 25-35. He must have had experience in a Building Contractors' office and be able to carry out and supervise all phases of: measurement and settlement of sub-contractors, accounts, agreement of interim valuations and preparation of final account. The post will carry a progressive salary commencing £850–£1,000, permanent staff pension rights, car and assistance with housing, if required.

Apply, stating age, education, experience, previous employer (in confidence) and commencing salary required to:

Chief Surveyor,
Croudace Ltd.,
97, Godstone Road,
Caterham, Surrey.

Leading firm of Building and Civil Engineering contractors invite applications from

COST SURVEYORS

for bonus and costing duties on contracts in the London area.

The positions are permanent, and offer good scope for progress. Superannuation and staff bonus schemes in operation.

Apply, in confidence, stating age, experience in detail, and salary required, to:

Box CS. 5143, A.K. Advtg.,
212a Shaftesbury Ave., LONDON, W.C.2

GALBRAITH BROS. LTD.

require

energetic and capable

SENIOR SURVEYOR

Excellent opportunity and good salary to a man experienced in all types and sizes of work.

Apply: **Chief Surveyor,**
Crayford Bridge,
Crayford, Kent.

CONTRACTS SURVEYOR

Required by a rapidly expanding firm of Building Contractors. Must be experienced and will be responsible for the planning and administration of large-scale contracts. Excellent opportunities for further advancement to a man with a good technical education, who is willing to work hard and progress with a go-ahead firm with a modern outlook. Anticipated age group 25–30. Realistic salary, annual bonus, this year's holiday arrangements honoured. Apply in writing, in first instance, to:

G. T. CROUCH LTD.,
KINGSTON HOUSE, STEPHENSON WAY,
THREE BRIDGES, CRAWLEY, SUSSEX.

THOMAS LOWE & SONS LIMITED

have a vacancy for a

BUILDING SURVEYOR

in their Birmingham Office. Must be capable of dealing with interim certificates, bonusing, final accounts, etc., on contracts up to £200,000. Car mileage allowance given, also assistance if necessary in obtaining accommodation. Staff Pension Scheme available after satisfactory probationary period. Applications should be, in the first place, in writing to:

Gazette Buildings,
Corporation Street, Birmingham 4,

stating age, qualifications and salary required.

SURVEYORS AND ASSISTANT SURVEYORS

Experienced in speculative housing development required for position at the Head Office in Potters Bar. The positions offered are progressive, carry good salaries and excellent prospects. Write, stating age, experience, salary required to:

The Chief Surveyor,
McMANUS & CO. LTD.,
Orchard House,
Potters Bar, Middlesex.

TROLLOPE & COLLS LIMITED

Invite applications for

BONUS SURVEYORS

fully experienced in the measurement and preparation of bonus and cost returns. Applications, giving full particulars of qualifications, experience and salary required, should be sent to:

The Assistant Secretary,
Trollope & Colls Limited
1, Noble Street,
Gresham Street,
London, E.C.2

SURVEYOR

required with first-class knowledge of the Industry from enquiry to final account stage, for small Contracts ranging from £500–£20,000. This position offers every facility for progress. Top salary, Pension Scheme, etc. Write, please, to:

Box No. 5478, "The Builder"

PLASTERING CONTRACTORS in South-West London Require experienced MEASURING SURVEYOR. Good salary and permanent pensionable position for suitable applicant.—Write, stating age, experience and present salary, to Box 928, "The Builder."

SUPERVISING SURVEYORS Required by progressive building contracting company, Weybridge, Surrey. Not more than 35 years of age. Excellent opportunities to men with initiative.—Full particulars to Box 5243, "The Builder."

BONUS SURVEYOR Required for contracts generally in the East London area.—Apply, giving full particulars of qualifications, experience and salary required, to Mr. G. Marney, A. E. SYMES, Ltd., Albert House, 236, High-street, Stratford, E.15.

SENIOR and SITE SURVEYORS Required for Manchester area for Contracts due to commence. Permanent and progressive pensionable position with commensurate salary.—Full details to: Chief Surveyor, W. J. SIMMS, SONS & COOKE, Ltd., 396 Wilmslow-road, Manchester 20.

SURVEYOR/DRAUGHTSMAN Required, site surveys, site layouts, road and sewer sections, negotiating with all service undertakings.—Particulars or 'phone for appointment to TRUSTEEL CORPORATION, Lime Lodge, Heath-road, Oxhey, Watford, Herts. (Watford 26256).

BUILDER'S SURVEYOR Required to deal with sub-contractors' and own final accounts. Permanent position offered.—Apply in writing stating previous experience and salary required, to FASSNIDGE SON & NORRIS, Ltd., Uxbridge.

BUILDING SURVEYOR Required in Architects' office. Duties will include preparation of surveys; working drawings and site supervision of smaller contracts; preparation of specifications and schedules for sub-contracts and general control of sub-contractors' work on large contracts. Five-day week, L.V.s. Pension scheme. Salary in range of £900 p.a.—LLEWELLYN SMITH & WATERS, 103 Old Brompton-road, S.W.7.

LONDON and Home Counties. SENIOR BONUS SURVEYOR Required. Must be experienced. Good salary and expenses paid.—Write to: GILBERT-ASH, Ltd., 2 Stanhope-gate, London, W.1. Ref.: RC/BS/L.

MAINTENANCE SURVEYOR (experienced) Required by a large private enterprise development group to undertake inspections, organisation and supervision of work in the Northern Home Counties.—Applicants must be car drivers, and should apply in writing stating experience and salary required, to Box 5375, "The Builder."

BUILDING/SURVEYOR Required by medium-sized company in West London. Aged between 25 and 30; should be experienced in all aspects of site measurement and the preparation of interim valuations and final accounts. Taking-off quantities an advantage.—Apply, in writing, giving details of experience, previous employers and salary required, to the Senior Estimator, DEARSLEY & CARTER, Ltd., 91 & 93 King-street, Hammersmith, W.6.

BUILDING SURVEYOR Required in Architects' office to assist in small works and estimates for larger projects.—Apply, giving details of experience and salary required, to LANCHESTER & LODGE, 10 Woburn-square, W.C.1.

TOKEN CONSTRUCTION COMPANY LTD.

require

BONUS SURVEYORS

for all types of contracts in the London Area. Good salaries paid and all positions are permanent and pensionable. Write, stating age, previous experience and salary required, to:

Chief Surveyor,
68, Mount Street, London, W.1

EXPERIENCED SURVEYORS

REQUIRED

Applicants must have thorough knowledge of Surveying from commencement of contract to final settlement, on varied types of contracts up to £150,000.

Progressive appointment. Staff Bonus and Pension schemes in operation.

Apply in writing giving details of experience and salary required to

The Manager, Walter Lilly & Co. Ltd.,
Westminster, S.W.1

SURVEYORS AND ASSISTANT SURVEYORS

required for varied and interesting contracts. Permanent positions, superannuation scheme, 5-day week. Existing holiday arrangements honoured.

Write, stating age, experience and salary required, to:

Chief Surveyor,
WILLIAM MOSS & SONS, LTD.,
North Circular Road,
Cricklewood, London, N.W.2.

COST AND BONUS SURVEYOR

Required for London area building contracts. Must be fully conversant in measuring all trades.

Apply giving details of age, experience, to:

Chief Surveyor,

GRIGGS & SON LTD.,
56, Victoria Street,
London, S.W.1.

BUILDING SITE MEASURING SURVEYOR

(Assistant age 20-25)

for interim valuations and measuring for all trades. Required by SIR LINDSAY PARKINSON & CO., Ltd., for development in the Nottingham area. This appointment is permanent, progressive and superannuated. —Write, with full details, to Housing Director, 6 Lambeth-road, London, S.E.1.

JUNIOR MEASURING SURVEYOR Required by Chartered Quantity Surveyors near Holborn, to assist with interim valuations and preparation of final accounts on varied contracts. Salary commensurate with experience and opportunity for advancement. Five-day week, L.V.s. holiday this year.—Write with details to Box 5434, "The Builder."

LONDON Brewery Require a SURVEYOR about 35 years of age, to supervise the maintenance work on their properties in one of their London areas. Five-day week and permanent pensionable post after completing a suitable probationary period.—Apply stating age, salary and details of experience, to Box 5430, "The Builder."

MEASURING SURVEYOR Required by expanding firm of Civil Engineers and Building Contractors, in the Cardiff area.—Please reply, giving age, experience and salary required, to Box 5425, "The Builder."

SMALL WORKS SURVEYOR. Estimate to final account; car provided.—Apply HAM 7421, CRAMB & DEAN Ltd., 104 Belsize-lane, N.W.3.

BUILDERS' SURVEYOR, experienced in site measuring and preparation of final accounts, for medium-sized contracts.—Apply by letter stating age and experience to FREDERICK J. MINNS & CO., Ltd., 23 Commercial-road, Woking, Surrey.

FORMCRETE Ltd. Require SURVEYOR. Experience in taking-off quantities for reinforced concrete contracts essential.—Write, stating age and experience, to FORMCRETE Ltd., Central Department, 4 Cedar Court, The Gateway, Portsmouth-road, Thames Ditton, Surrey.

BUILDERS' SURVEYORS Required in Yorkshire for measuring variations and preparation of final accounts on contracts up to £500,000. Age 25-45. Four-figure salary envisaged and staff pension scheme for suitable candidates.—Box 5468, "The Builder."

BUILDING SURVEYOR for L.C.C. school and flats (two contracts) in S.E. London. Must be experienced in contract from start to final account.—State age, experience and salary required, to Box 5466, "The Builder."

EXPERIENCED SURVEYOR Required for site measurement, interim valuations and final account. South London area. Non-contributory pension scheme, annual bonus scheme.—Write, AGOMBAR, 109 Elmers End-road, Beckenham, Kent, or 'phone: SYD 4481/5, Ext. 18.

MEASURING SURVEYOR for interim valuations and final accounts Required by London Chartered Quantity Surveyors. Luncheon vouchers and non-contributory pension scheme.—Write, stating age, experience and salary required, to Box 973, "The Builder."

BUILDING SURVEYORS

required for expanding organisation in Sussex. Applicants should have good technical background and be experienced in all phases of surveying. Initial duties may involve planning, administration or site progressing. Excellent opportunities for young keen surveyors to go forward with a modern Company, holiday arrangements honoured, good salary and bonus.

Apply to:

Box No. 5374 "The Builder"

SURVEYOR

required for Shuttering Contractors with offices in the S.W. area. Experience of shuttering essential. Good pay and prospects. Write, in first instance, giving details of experience, etc., to:

Box No. 5479, "The Builder"

ASSISTANT SURVEYORS

ASSISTANT Required for Surveyor and Estimator with contractors in Brentford. Some experience necessary.—Apply, Box 5245, "The Builder."

BUILDING SURVEYOR'S ASSISTANT Required for Small Contracts Department of progressive Building Contractors in Surrey and Sussex. Age 20-25. Excellent opportunities for right candidate.—Write giving details of experience, education and salary required, to: G. T. CROUCH, Ltd., Small Contracts Dept., Barnett Wood-lane, Leatherhead, Surrey.

ASSISTANT SURVEYOR Required for measuring Sub-contractors' work, valuations, final accounts, etc., for sites in the London area.—Apply, giving full details of experience, salary required, etc., to R. MANSELL, Ltd., Grant-road, Croydon.

YOUNG ASSISTANT attending technical college Required as PERSONAL ASSISTANT to North West London Chartered Quantity Surveyor. Time off for study to conscientious applicant. Excellent opportunity to gain all-round experience.—Write to L. M. BRENNER, F.R.I.C.S., Vivian House, 166 Hampstead-way, N.W.11.

ASSISTANT SURVEYOR, aged 20-25, with H.N.C. or equivalent qualifications Required for group of estate and property development companies. Duties comprise the preparation of bills of quantities and material scheduling; site experience an advantage. Pension scheme, staff canteen and assistance will be given if required in obtaining a house in N.W. Kent. —Apply, Projects Manager, GOUGH COOPER & COMPANY, Ltd., Wilmington House, Wilmington, Dartford, Kent. Telephone: Dartford 20288.

ASSISTANT in Surveying and Estimating department. Progressive position on medium-size contracts.—Apply HAM 7421, CRAMB & DEAN Ltd., 104 Belsize-lane, N.W.3.

ASSISTANT SURVEYOR Required to assist in Building Surveyor section of Architects. Preferably aged 30-35, with a good all-round professional experience in all branches of building surveying including the carrying out of alterations and improvements. Good draughtsmanship essential.—Box 5437, "The Builder."

ASSISTANT BUILDING SURVEYOR Required by London Architects to take part in surveying sites and buildings with theodolite and level. Preference given to holder of professional qualifications. Commencing salary £600-£1,000 according to ability and experience. Five-day week. Details, please, age, experience, salary required, Box 5377, "The Builder."

ASSISTANT SURVEYOR Required. Salary according to experience.—GEORGE STONE (FOLKESTONE), Ltd., 127 Sandgate-road, Folkestone.

ASSISTANT SURVEYOR

East London Building Contractors. For site measuring, valuations, etc. Medium size Contracts. Permanency and pension for suitable applicant. Car or allowance provided. Salary commensurate with ability.

Apply **Box No. 5382 "The Builder."**

ASSISTANT

SURVEYOR

required by firm of National Contractors in their Small Works Department. This position offers every opportunity for advancement. Good salary, Pension Scheme, etc. Please reply, giving details of experience to date, etc., to:

Box No. 5477, "The Builder"

ASSISTANT SURVEYOR

required. Experience in measuring and agreeing final accounts essential. Willing to assist Estimator. Good opportunity for advancement for right type.

Apply in writing to:

SLOGGETTS (CONTRACTORS) LTD.
209 High St., Hampton Hill, Middx.

HUMPHREYS LTD
require

ASSISTANT SURVEYOR

Capable of relieving the burden of Senior Surveyor handling major contracts in excess of £1M.

Permanent position based on London office, but particularly suitable for applicant residing between London and Brighton.

Apply in writing, stating age, experience and salary required, to:

Personnel Department,
199, Knightsbridge, S.W.7

ASSISTANT SURVEYOR

This position offers every opportunity for advancement for an Assistant Surveyor, together with a first-class knowledge of the Industry from enquiry to final account. Good salary, Pension Scheme, etc.

Write please to:

Box No. 5353, "The Builder"

TERSONS LIMITED
require

ASSISTANT SURVEYORS

in the West Middlesex area.

Applicants are offered excellent opportunities to widen their experience, with good salaries, regularly reviewed, together with bonus and superannuation benefits after probationary period. Holiday arrangements accepted.

Apply with full details of age, qualifications and experience to

The Secretary,
Tersons Ltd.,
Dollis Park, Finchley, London, N.3.,

quoting reference K.C.

ASSISTANT BUILDING SURVEYOR

Age about 25 required by a National Firm of Building and Civil Engineering Contractors in their West End Office for varied and interesting work including taking off, estimating, site measuring, accounts, targeting and planning. Preference will be given to applicants who have some experience in large scale housing and flat development schemes.

The position is permanent and progressive and a superannuation scheme is available after a probationary period. **Commencing salary about £750 p.a. plus a half-yearly bonus.**

Apply in writing to the

Construction Manager,

JAMES MILLER & PARTNERS LTD.
7, Suffolk Street, Pall Mall, S.W.1

JUNIORS

JUNIOR ASSISTANT for buying department. Progressive position for suitable applicant.—Apply, with full particulars, to HAYMILLS (CONTRACTORS), Ltd., Hanger Green, Western-avenue, W.5. (Adjoining Park Royal station.)

JUNIOR TRAINEE QUANTITY SURVEYOR Required by Westminster Quantity Surveyors.—Write, giving particulars, to Box 958, "The Builder."

YOUTH (just leaving school) Required in Chartered Quantity Surveyors' office near Holborn. Opportunity to learn the profession.—Write, stating age and details of education, to WM. C. INMAN & PARTNERS, 7 New-square, Lincoln's Inn, W.C.2.

JUNIOR SURVEYOR/TRAINEE Required by London Architects to assist in the survey of land and buildings together with other duties. G.C.E. with four credits (minimum) would be an advantage but applicant undertaking further studies considered and may be offered assistance if required. Five-day week, commencing salary £250-£350, according to attainments.—Details, please, age, education, salary required, Box 5378, "The Builder."

JUNIOR Required in Quantity Surveyors office in Gray's Inn. Please write stating age, experience and salary required.—Box 5385, "The Builder."

WEST END professional Quantity Surveyor's office has vacancy for trainee QUANTITY SURVEYOR. Time allowed off for study. Commencing salary £312 per annum with regular increases. Apply in own handwriting giving standard of scholastic training.—Box 5369, "The Builder."

TAKERS OFF

TAKERS-OFF, Final standard, Required by Quantity Surveyors, Westminster. Good salary, luncheon vouchers. No Saturdays.—Apply, Box 929, "The Builder."

SENIOR TAKER-OFF for responsible position in busy Quantity Surveyors' office. Westminster. Salary commensurate with responsibility. Luncheon vouchers, pension scheme.—Brief details to Box 931, "The Builder."

SMALL FIRM of Purley, Surrey, Chartered Quantity Surveyors Require JUNIOR TAKER-OFF (final standard). Pleasant working conditions.—Telephone: BYWood 1491 for appointment.

TAKERS-OFF Required in Chartered Quantity Surveyors' office on w-ork which is varied in nature. Good salaries will be paid to persons who will maintain the high professional standard of the office. Luncheon vouchers, pension and life insurance schemes in operation.—Apply by telephone, Chancery 5841, Reference S.D.M., or in writing, to Box 910, "The Builder."

JUNIOR TAKER-OFF Required by West End Chartered Quantity Surveyor with 2 or 3 years' experience of taking-off. Salary £900 to £1,000.—Reply in writing stating age and experience, to Box 5152, "The Builder."

SENIOR TAKER-OFF Required. Progressive position, luncheon vouchers, pension and life insurance. —BRYDEN & WOODFORD, 4 Upper Belgrave-street, S.W.1. BELgravia 6171.

SENIOR TAKER-OFF Required in medium-size professional office near Victoria for dealing with projects, including taking-off and settlement of accounts. Commencing salary £1,350. Non-contributory pension scheme. Increased rate paid for overtime.—Write, stating age and experience, to Box 5232, "The Builder."

JUNIOR TAKER-OFF Required in Quantity Surveyors' West End office. Five-day week and pension scheme. Two weeks' holiday this year. Salary £900-£1,000 per year according to experience.—Please write, giving experience, etc., to Box 5230, "The Builder."

JUNIOR TAKERS-OFF Required by Quantity Surveyors in South Kensington. Intermediate/Final standard. Keen and energetic, as personal assistants to senior staff. £650-£750 according to ability. L.V.s, 5-day week. Sliding holiday scale, two weeks this year.—Box 5236, "The Builder."

CHARTERED QUANTITY SURVEYORS Require TAKER-OFF, A.R.I.C.S., for medium-sized varied London practice. High salary scales paid to suitable applicants with security and prospects. Only Takers-off willing to take responsibility and work hard and efficiently for a salary above average, need apply.—Please write, Box 5255, "The Builder."

LONDON CHARTERED QUANTITY SURVEYORS Require young, keen TAKERS-OFF, of Final R.I.C.S. standard, with good prospects in expanding practice.—Full details of experience, to Box 5270, "The Builder."

A. S. WILSON AND PARTNERS, Chartered Quantity Surveyors, Require TAKERS-OFF and WORKERS-UP in London and Provincial branches.—Apply, stating experience, to 8 Storey's-gate, Westminster, S.W.1.

JUNIOR TAKING-OFF ASSISTANT Required for responsible position in speculative building company. The appointment is permanent and pensionable. Salary commensurate with ability. L.V. scheme.—Apply PERCY BILTON Ltd., Housing Division, 54-58 Uxbridge-road, London, W.5.

TOP PEOPLE Required for top jobs in not very top firm of London Quantity Surveyors. Age 30-35. Top salary.—Box 5326, "The Builder."

MANCHESTER QUANTITY SURVEYORS

Require

TAKERS-OFF

Salary £1,250—£1,500 per annum.

Superannuation scheme after trial period.

Bonus scheme.
Holiday this year.

Box No. 5261, 'The Builder'

FREDERICK S. SNOW & PARTNERS

CONSULTING ENGINEERS

have vacancies on their permanent staff for

TAKERS OFF

in their expanding Quantity Surveyors Dept. This Dept., which is approved by the R.I.C.S. and I.Q.S., is in a new building at 71 Southwark Street, London, S.E.1.

Five-day week, Luncheon Vouchers, Superannuation.

Please reply in writing stating age, experience, qualifications and salary required to:

E. W. Ashford, A.R.I.C.S., F.I.Q.S.,
'Ross House,'
144 Southwark Street,
London, S.E.1.

SENIOR ASSISTANT Required by London firm of Chartered Quantity Surveyors. Permanent position with high level of remuneration. Luncheon vouchers and pension scheme. Applicants should give details of age, experience and salary required. Box 5344, "The Builder."

CHARTERED QUANTITY SURVEYORS Require SENIOR ASSISTANT in their London office. Salary up to £1,700 per annum according to age and experience. Luncheon vouchers and pension scheme.—Applicants are requested to write to Box 5345, "The Builder."

JUNIOR TAKER-OFF Required by London firm of Chartered Quantity Surveyors. Salary £750-£1,000 for five-day week. Luncheon vouchers, overtime payments and pension scheme.—Please apply, stating age and experience, to Box 5346, "The Builder."

TAKERS-OFF and MEASURING SURVEYORS Required by London Chartered Quantity Surveyors. Luncheon vouchers and non-contributory pension scheme.—Write, stating age, experience and salary required, to Box 977, "The Builder."

CHARTERED QUANTITY SURVEYORS Require TAKER-OFF, A.R.I.C.S. Permanent position, W.C.2. Good comprehensive experience essential. Salary up to £1,700 per annum.—Please write, stating age, experience and salary required, to Box 5464, "The Builder."

SHEFFIELD C.Q.S.s have vacancies for TAKERS-OFF, preferably of R.I.C.S. Final and Inter. standard. Luncheon vouchers, pension and life insurance schemes.—Reply, giving brief particulars, to Box 5461, "The Builder."

TAKER-OFF Required for Chartered Quantity Surveyors' office. Car allowance.—Box 5475, "The Builder."

JOHN McBAIN & PARTNERS, Quantity Surveyors, Require taker-off and worker-up at their St. Albans office.—Apply 25 Ludgate-hill, London, E.C.4.

RECENTLY QUALIFIED TAKER-OFF Required to work under resident partner for a position offering much scope and responsibility in new branch office at Winchester, with work covering a wide area of the south.—Apply to D. A. DEGERDON & PARTNERS, F./A./A.R.I.C.S., 12 Goodwins-court, St. Martins-lane, W.C.2.

du BOSKY AND PARTNERS, Chartered Quantity SURVEYORS, 28 Berkeley-square, W.1. Require Senior and Junior TAKERS-OFF. Senior qualified capable of running contracts. Junior Intermediate to Final Standard. Excellent prospects, Pension scheme.

JUNIOR TAKER-OFF. Excellent opportunity to broaden experience in a congenial office. Good salary. L.V.s, 35-hour week.—Please ring MIN 2845 or write Box 5423, "The Builder."

JUNIOR TAKER-OFF. R.I.C.S., Intermediate standard. Required for small City Q.S. office. Varied work and opportunity for quick progress and additional responsibility. Reply stating age, experience and salary.—Box 5388, "The Builder."

TAKERS-OFF Required by City firm of London Chartered Quantity Surveyors.—Apply, giving age, experience and salary required, Box 5031, "The Builder."

TAKER-OFF, R.I.C.S., or similar, Required for West End office of BOND, FOSTER & PARTNERS. Age 30 years.—Please apply in writing stating salary required to 19 Hertford-street, W.1.

WORKERS UP

EXPANDING FIRM OF QUANTITY SURVEYORS, Westminster, have vacancies for WORKERS-UP, with four years' experience or longer. Luncheon vouchers, pension scheme.—Apply to Box 938, "The Builder."

WORKERS-UP Required, Senior and Junior, for office of Chartered Quantity Surveyors in the Holborn area.—Box 950, "The Builder."

QUANTITY SURVEYORS in Westminster Require JUNIOR WORKER-UP. Opportunities of progressing through training to more senior position.—Please reply, stating age, experience and salary, to Box 963, "The Builder."

SENIOR WORKER-UP Required by Chartered Surveyors, Westminster, to take charge. State experience, age and salary required.—Box 5093, "The Builder."

FIRM of Chartered Surveyors have a vacancy for an experienced permanent Worker-up. Luncheon vouchers. Five-day week. Overtime paid and holiday bonus. Salary according to experience but opportunity to earn over £1,000 p.a.—Box 922, "The Builder."

WORKERS-UP Required for offices in London and Kingston, with opportunity for advancement. Luncheon vouchers, pension scheme, holiday this year.—Please apply, stating age, expegience and salary, to ERIC G. LYNDE & PARTNERS, 41 Russell-square, London, W.C.1. LANgham 1758.

SENIOR WORKER-UP Required by London Quantity Surveyors, to take charge of department. Three weeks' holiday per annum.—Write, stating age, experience and salary required, to Box 955, "The Builder."

WORKER-UP, experienced, Required by Quantity Surveyors in South Kensington. Salary £650-£800 according to experience. L.V.s, 5-day week. Sliding holiday scale, two weeks this year.—Box 5235, "The Builder."

SENIOR WORKER-UP Required for London Chartered Quantity Surveyors. Security for right applicant willing to make working-up his career. Good salary in return for hard work and competence.—Please write, stating age, experience and salary required, to Box 5256, "The Builder."

WORKER-UP, with about 3 years' experience. Required by an expanding Surrey firm. Excellent opportunities of advancement and to earn high salary. Non-contributory pension scheme, bonus and pleasant provincial offices.—Apply, giving full details of previous training to Box 5247, "The Builder."

WORKER-UP Required by small professional firm in the City. Opportunities for advancement. Five-day week.—'Phone MONarch 0597 for appointment.

WORKER-UP Required for medium-size Quantity Surveyors office in Victoria area. Good prospects; luncheon vouchers; non-contributory pension scheme. —Write stating age, experience and salary required to Box 5355, "The Builder."

WORKER-UP Required by firm of Chartered Quantity Surveyors for long term contract at Newport, Mon. Rented accommodation available.—Please apply stating age, experience and salary required, to Box 5347, "The Builder."

FIRM of Chartered Quantity Surveyors have vacancy in their London office for permanent position as WORKER-UP. Luncheon vouchers. Pension scheme. Overtime paid.—Please write stating age and experience to Box 5348 "The Builder."

WORKER-UP. Vacancy in Swansea/Llanelly site offices of firm of Chartered Quantity Surveyors.—Please apply stating age, experience and salary required, to Box 5349, "The Builder."

WORKERS-UP Required by London Chartered Quantity Surveyors for permanent staff. Luncheon vouchers.—Write, stating age, experience and salary required, to Box 979, "The Builder."

WORKER-UP Required for Chartered Quantity Surveyors' office. Progressive post.—Box 5474, "The Builder."

JUNIOR WORKER-UP Required by Sussex C.Q.S. Five-day week, luncheon vouchers.—Write, stating age, experience and salary required, Box 5454, "The Builder."

ASSISTANT WORKER-UP for Chartered Quantity Surveyors. Salary up to £1,000. Pension scheme, five-day week. Write giving age, experience and salary required.—Box 5471, "The Builder."

GOOD OPPORTUNITY exists for a WORKER-UP with about 2 to 3 years' experience, in small Chartered Quantity Surveyor's office.—Reply to A. L. SMITH, 124 Victoria-street, S.W.1.

CITY QUANTITY SURVEYORS Require WORKER-UP. Five-day week, luncheon vouchers, pension scheme and paid overtime.—Please reply stating age, experience and salary required, to SYDNEY C. GORDON & PARTNERS, Finsbury House, Blomfield-street, E.C.2.

INTERMEDIATE standard ASSISTANT Required by Chartered Quantity Surveyors to do Working-up, Junior Taking-off and Site Measuring. Salary according to experience and qualifications. Full details to HARRIS, ROURKE & SIMPSON, 35 Catherine-street, Salisbury. Tel No.: Salisbury 4914.

WORKER-UP Required in Quantity Surveyors office in Gray's Inn. Please write, stating age, experience and salary required.—Box 5384, "The Builder."

WORKER-UP, experienced, Required by firm of Chartered Quantity Surveyors near Victoria Station. Pleasant small office, five-day week, L.V.s, holiday this year.—Reply giving age, experience and salary required, to Box 5379, "The Builder."

EXPERIENCED WORKER-UP Required. Excellent opportunities to take responsible position; five-day week, pension scheme.—Full particulars, in own handwriting, to LISSENDENS, 12 Grafton-street, London, W.1.

WORKER-UP Required in Chartered Quantity Surveyors' office near Holborn. Not less than 3 years' experience. Good salary and overtime rates paid. L.V.s, 5-day week. Holiday this year.—Write details of age and experience to Box 5370, "The Builder."

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STRUCTURAL ENGINEER Required to take charge of Consulting Department in a large Architects' office. Sound structural knowledge and imaginative outlook a necessity.—Apply stating experience and salary required, to Box 5252, "The Builder."

£1,200 per annum

for **Assistant in Building and Civil Engineering** with sound knowledge of all trades, ability to read drawings and prepare schedules for ordering. Progressive and permanent position in office. Three weeks annual holiday; staff restaurant; pension scheme.

Write, giving details, to:

Box No. 5403, "The Builder"

PLANNING ENGINEER

required

to deal with all aspects of the planning of Building Contracts from initial stages to operational programming, plant installation, development and application of constructional technique, etc.

Also

TRAINEES

with sound experience of building work, either management or design, or operatives having genuine interest in this work.

Apply with details to Personnel Department.

HUMPHREYS LTD.,
199 KNIGHTSBRIDGE, S.W.7.

HOWARD FARROW LTD.
INVITE APPLICATIONS FOR

PLANNING ENGINEERS

Applicants should have a sound knowledge of quantities, the preparation of overall programmes, detailed method statements and have had site experience. Appointment is permanent with participation in the superannuation scheme after trial period.

Applicants should apply in writing, stating age, education, training and experience in detail, and salary required, to: E.L.P., **Howard Farrow Ltd., Highfield Road, Golders Green Road, London, N.W.11.**

PLANNING AND PROGRESSING BUILDING and CIVIL ENGINEERING CONTRACTS. This vacancy calls for a training in the industry to H.N.C. or L.I.O.B. standard with a full knowledge of B. of Q. specifications and drawings and some site organisation, to prepare progress charts and schedules for new contracts.—Applications should state fully age and history, to: WILSON LOVATT & SONS, Ltd., Clarence-street, Wolverhampton.

WANTED immediately ENGINEER/AGENT for Sewage Disposal Works Contract in London. Good prospects, superannuation scheme, car provided. Please write stating age, experience and salary required.—J. L. EVE CONSTRUCTION CO., Ltd., 17 Hillside, Ridgway, Wimbledon, S.W.19.

ESTIMATORS

ESTIMATOR for small works department Required by Builder in Croydon area. Applicant to have initiative and able to prepare own specifications. Progressive post for suitable applicant.—Box 5025, "The Builder."

ASSISTANT ESTIMATOR Required to assist Senior Estimator, by Building and Civil Engineering Contractors engaged in major works up to £250,000. Applicants should be L.I.O.B. or I.Q.S., Intermediate standard, and have experience of Taking-off and Surveying. The position, which is permanent and progressive, is at the head office of CHARLES R. PRICE, Kingsbury-road, London, N.W.9.—Write, giving full particulars, to above address.

BUILDING ESTIMATOR Required with experience in pricing bills of quantities and cost analysis.—Write, with details of experience and salary required, to Building Manager, BRIXABUR BUILDERS, Ltd., 2 Whitfield-street, Gloucester.

ESTIMATOR/SURVEYOR Required for large and small Contracts, East London and Essex area. Incentive scheme operating. Car provided.—Apply stating age, experience and salary required, to HAINES & WARWICK, Ltd., 12 Bradford-road, Seven Kings, Ilford, Essex.

ESTIMATOR/SURVEYOR Required. Jobs up to £25,000 with small builders in Sutton and Cheam area. Must be experienced and able to work on own initiative. Salary according to experience.—Box 5306, "The Builder."

SENIOR ESTIMATOR Required by Building Contractors whose head office is near Guildford. Applicants, who should be fully experienced, are invited to send full details of age, experience and qualifications in confidence to Box 909, "The Builder."

JUNIOR ESTIMATOR Required for Building Contractor, North East London. Some experience required and ability to measure own quantities. Permanent position and excellent opportunity.—Write, in own handwriting, stating age and experience, to Box 5456, "The Builder."

ESTIMATOR SURVEYOR for contracts from small works to £100,000. Salary and bonus; car provided. Age 30-40 preferred.—Reply, stating age, experience and salary required, to COURTNEY & FAIRBAIRN, Ltd., 377 Albany-road, S.E.5.

JUNIOR ESTIMATOR Required for busy estate developers' office.—Write, stating age, experience and salary required, to the General Manager, DAVIS CONTRACTORS, Ltd., 346/350 Kilburn High-road, N.W.6.

ESTIMATOR Required for small/medium Building Contractors on Surrey/Hants border.—Permanency and good opportunity for suitable applicant, who should send full details of age, experience and salary, confidentially, to Box 5373, "The Builder."

ESTIMATOR/SURVEYOR Required by South London subsidiary of well-known West End firm for small works jobbing. Must be experienced in all trades. Good prospects for keen, well-trained young man.—Apply with full details age, salary, experience, etc., to Box 5395, "The Builder."

ESTIMATOR Required by Heal's cabinet factory, experienced in contract and hand-made quality furniture, architectural and decorative joinery. Varied and interesting work with excellent prospects for keen and energetic young man.—Apply Staff Manager, HEAL & SON, Ltd., 196, Tottenham Court-road, W.1.

ESTIMATOR/SURVEYOR

Required by old-established Building Contractors, East Sussex. Capable of dealing with Contracts from enquiry to final account, with sound all-round experience. Write stating age and salary required.

Box No. 5286, "The Builder"

SHEPHERD

A well established group of companies employing over 2,500 people and responsible for a wide variety of building and civil engineering work in Yorkshire, Lancashire and the North-Eastern Counties offers an exceptional opportunity for a

TRAINEE ESTIMATOR

Applicants, between the ages of 21 and 28, must have attained H.N.C. in Building or L.I.O.B., should have had some experience of quantity surveying, and must have a genuine aptitude for and interest in estimating.

The successful applicant will become a permanent member of a highly developed and busy Estimating Department at our Head Office in York and will receive thorough and comprehensive training under expert guidance and supervision.

The position offers a good progressive salary, annual bonus and non-contributory pension together with a five day week and three weeks annual holiday. Existing holiday arrangements will be honoured and assistance with housing will be available if required.

Written applications, stating age, details of experience and qualifications and some indication of commencing salary required, should be addressed for the personal attention of:

D. Ransome, F.I.Q.S., F.I.O.B.,
Director and Chief Quantity Surveyor,
F. SHEPHERD & SON LTD.,
Building and Civil Engineering Contractors
Blue Bridge Lane, York.

DRABBLE CONSTRUCTION LTD.

require an

ESTIMATOR

experienced in tendering for building and civil engineering work up to £250,000. Superannuation scheme in operation. Apply, full details, age, experience, salary required to:

Managing Director,
Drabble Construction Ltd.,
1 Cannon Street, Wellingborough,
Northants.
Tel. W'boro' 3441.

SHOPFITTING

Progressive Company requires

EXPERIENCED ESTIMATOR

Selected applicant would qualify for paid holidays this year and pension scheme.

SETTER-OUT

On terms similar to above.

EXPERIENCED JOINERY MAN

On terms similar to above.

Apply:
City Industrial Ltd.,
139-149 Fonthill Rd., N.4.
ARC. 0606.

SENIOR ESTIMATOR

required

Fully experienced in pricing all types and sizes of contracts.

Apply:
Galbraith Bros. Ltd.,
Crayford Bridge,
Crayford, Kent
(for attention Managing Director)

ESTIMATOR/ SURVEYOR

required by London Specialists in adaptation, conversion and decoration.

Attractive salary. Participation in pension scheme after period of satisfactory service. Car provided, or car allowance. Existing holiday arrangements honoured. Reply, stating age and experience to

Box No. 5368, "The Builder"

PARTITIONING AND ACOUSTIC CEILING SPECIALISTS

COMPACTOM LTD.

OXGATE LANE, CRICKLEWOOD, N.W.2

This expanding Organisation offers permanent appointments with good prospects for

ESTIMATORS

with joinery or acoustic ceiling estimating experience. No reasonable age restrictions.

DRAUGHTSMEN

Used to scale drawings. Joinery/shopfitting experience an advantage.

Write, stating experience, age and salary required, or 'phone GLAdstone 6633—Mr. Bond for Estimators, Mr. Pyne for Draughtsmen.

BOVIS LIMITED

require

ESTIMATORS

in their branch offices in north-west London.

This is a good opportunity for keen young men as the business is expanding and there will be good opportunities for promotion. The position carries a good salary and is pensionable. A staff canteen is available.

Please write for interview to Ref. MC, 1 Stanhope Gate, London W.1.

ESTIMATOR

required for recently formed Building Division of large Civil Engineering Company.

Salary £1,450 p.a. plus bonus.

Please apply to Box 5367 "The Builder"

MANAGERS

BUILDING CONTRACTORS, offices Brighton, Require fully experienced CONTRACTS MANAGER, housing and flat contracts.—Apply, giving full particulars of past experience, Box 962, "The Builder."

CONTRACTS MANAGER. ASSISTANT Required E.11 area. Good prospects for man with drive and initiative in expanding firm.—Full particulars of previous experience, salary required, etc., to Box 4978, "The Builder."

PERCY BILTON, Ltd. (Housing Division). Required, SITE MANAGER (London based) to take control of private estate development of south coast and other areas. Applicants should be able to prepare and adhere to planned programme, negotiate with and control sub-contractors and produce a good standard of work.—Apply, giving full particulars of age, experience and salary required, to Building Manager, Bilton House, 54/58 Uxbridge-road, Ealing, W.5.

ASSISTANT BUILDING MANAGER Required by national Builders engaged primarily in Estate Development. This position, based in London, offers permanency and prospects. Group life and pension scheme. Car provided; 1961 holiday arrangements honoured.—Reply, giving details of experience, salary required, and when available, to Box 5332, "The Builder."

GENERAL MANAGER Required for the Plant company of a rapidly-expanding development and contracting group. Duties will consist of re-organisation and expansion of plant department for Construction company, also development of plant hire business. Only men with proven record of success in similar positions need apply. Excellent salary and conditions, including non-contributory pension scheme. All applications will be dealt with in confidence by Managing Director personally.—Apply, giving full details of experience and qualifications, to Box 5465, "The Builder."

CONTRACTS MANAGER ASSISTANT. Excellent prospects for energetic young man with ability to assist in progressive expansion of small contractors in S.W. London. Must be capable of running contracts of £20,000 efficiently. Some knowledge of planning an advantage.—Write, stating experience, age and salary, Box 5482, "The Builder."

TECHNICAL ASSISTANT Required for Construction Manager, to be responsible for General Assistance in Contract Supervision, Co-ordination of details and drawings for Sub-Contractors and Suppliers and Phasing Deliveries of Materials. This is a new post within a progressive organisation calling for practical experience in all forms of building construction.—Apply in writing to E. S. GATES, Ltd., Chalfont Station-road, Amersham, Bucks.

CONTRACT MANAGER

Manager required to supervise contracts ancillary to Building Trades in North-East England. The candidate selected who should have at least Higher National Certificate in a Trade will work after initial training period from a Newcastle Branch Office and should have had supervisory experience on contracts run on modern methods of programming, cost control, work study and labour management.

Age preferred 28/34 salary not less than £1,000 a year according to experience. Car provided.

Candidates should write stating age, qualifications and experience in chronological order, present appointment and salary to Urwick, Orr & Partners Ltd., who have been asked to advise in connection with this appointment at: **Urwick House, 14 Hobart Place, London, S.W.1,** quoting reference CM/1518 on the envelope.

TOKEN CONSTRUCTION COMPANY LTD.

require

JUNIOR ESTIMATOR
JUNIOR SURVEYOR

for Estimating and Statistic Department; General knowledge of Estimating or Surveying required. Excellent opportunities for advancement for intelligent men. Write, stating age, previous experience and salary required to:

Personnel Director,
68, Mount Street, London, W.1

ESTIMATOR

Progressive Medium Sized firm in South West England require experienced Estimator to tender for all Building Works from jobbing to £200,000, with minimum supervision.

Permanent and pensionable post.

Write stating age, experience and salary required to—

Box 5311, "The Builder"

COSTAIN

Building Contracts Manager

LONDON

This appointment is with one of the area organisations of Richard Costain (Construction) Ltd., and the successful candidate will be directly responsible to the Area General Manager.

Men, aged 35-50, who have had experience with contractors in controlling the construction of a group of building projects, are invited to write for full details of the duties and conditions of employment for this post.

Please address letters to:

THE PERSONNEL MANAGER,

RICHARD COSTAIN LTD., 111 WESTMINSTER BRIDGE RD., LONDON, S.E.1

THE ADVISORY SERVICE FOR THE BUILDING INDUSTRY

has been retained by

Geo. Houlton & Sons Ltd. of Hull

to advise on the following appointments

CONTRACT MANAGER

responsible to the Construction Manager for managing a group of building contracts, which includes contracts up to £200,000

he should be qualified in building or structural engineering, be in the 35/45 year group and have a working knowledge of modern management techniques such as planning, work study, cost control and incentives; local knowledge of building in Hull or Yorkshire an advantage.

SENIOR SURVEYOR

responsible to the Chief Surveyor for building surveying duties including quantities, site measurements, certificates and final accounts

he should be a qualified builders' surveyor, be in the 30/40 year age group and have experience of modern management techniques, such as incentives, operation costing and cost/value comparisons.

For both posts, staff conditions include an incremental salary scale plus profit-sharing, a car or car allowance. Assistance with housing can be arranged. The company's turnover is expanding and the Directors wish to recruit capable and enthusiastic technical men with progressive ideas on construction, surveying and method improvements.

Reply, in confidence, in the first instance, stating age, education, qualifications, experience and salary required, to:

B.A.S., 82, New Cavendish Street, London, W.1

NATIONAL CATERING COMPANY

LONDON

requires

YOUNG EXECUTIVE

with building surveying training and experience. Age 30–40. Will work in conjunction with Architects department, but directly responsible to Managing Director for programming and processing of building, reconstruction and enlargement of premises being carried out for the Company by contract, and ensuring completion on schedule. Must already have had practical experience with good building firm and essential to have a business brain.
Non-contributory pension scheme. Salary £2,500 p.a.

Box No. 5443, "The Builder"

ADDITIONAL BUILDING INSPECTOR

Messrs. Cow & Gate Limited urgently require an additional Building Inspector in their Architect's Department.
He should be aged about 45 years and have had at least 20 years senior experience in the Industry, half of which should have been spent as a Foreman on industrial contracts.
He will be required to assist in the supervision of new buildings and carry out inspection of existing buildings for maintenance purposes. Previous experience in a similar capacity would be an advantage.
Applications giving details of experience, present position and salary required, should be addressed to the Chief Architect,

COW & GATE LIMITED,
Central Buildings, North Street,
Guildford, Surrey.

Contracts Manager

required by National Group of Building Contractors.

Applicants must possess first-class ability and experience.

Car provided. Generous Salary. Superannuation Scheme after probationary period. Please write in first instance to:

Box No. 5336, "The Builder"

PERSONAL ASSISTANT

To Manager of
Small Works Department
of Large London Contractors

This position offers a fine opportunity for a young man with enthusiasm and ambition. The applicant must have previous experience in all aspects of a Small Works Department, Jobbing or Small Builder, which entails supervising, estimating, preparation of accounts, etc. Car provided, Pension Scheme and regular salary reviews.

Box No. 5399 "The Builder"

CONTRACTS MANAGER

REQUIRED BY WELL KNOWN ESTATE DEVELOPERS IN LONDON & HOME COUNTIES

Applicants must have extensive experience of controlling contracts and sub-contractors for Houses, Flats, Maisonettes, etc.

TOP SALARY — CAR PROVIDED

PERMANENT & PENSIONABLE APPOINTMENT

Write in full detail to:

M.D., Box 5445 "The Builder"

SHEPHERD

A well-established group of companies employing over 2,500 people and responsible for a wide variety of building and civil engineering work in Yorkshire, Lancashire, and the North-Eastern Counties has vacancies in their York Division for

SITE MANAGER—Two

Applicants, preferably between 30 and 45 years of age, should have had previous experience in the capacity of manager, agent or senior general foreman and must be conversant with the technical aspects of most types of building construction. A genuine interest in the application of detailed planning and production control are essential. The successful applicants must be capable of undertaking the management of individual contracts of up to £1,000,000 in value.

SENIOR QUANTITY SURVEYOR

Preferably between 30 and 40 years of age, with sound training and a minimum of ten years' building contracting experience covering a wide variety of construction work. This is a senior position calling for a man of sound ability and integrity.

These vacancies, which have arisen as a result of internal promotion within the group, offer permanent positions with attractive staff conditions, progressive salary, annual bonus, non-contributory pension scheme, five-day week and three weeks annual holiday. Local travelling will be involved and private cars will be provided. Assistance with housing will be available if required.

Write, giving brief details of age, qualifications, experience and some indication of commencing salary required, to:

Michael F. Shepherd, F.I.O.B.—Director,

F. SHEPHERD & SON LTD.,

Building and Civil Engineering Contractors,
Blue Bridge Lane, York.

COSTAIN

VACANCIES IN THE PERSONNEL DEPARTMENT

Personnel Officer required to recruit professional and technical staff for the building and civil engineering industry. Applications are invited from men preferably aged 28-30 who have been trained and have experience in industrial personnel administration including staff interviewing. This is a progressive post offering excellent opportunities in an expanding group organisation.

Labour Officer required to select and organise the development and training of site production staff up to Section Foreman level. Applications are invited from men aged 30-50 with a sound knowledge of the building and civil engineering industry and preferably experienced in the training of site-supervisory staff.

Please write to Personnel Manager,

RICHARD COSTAIN LIMITED, 111 WESTMINSTER BRIDGE ROAD, S.E.1.

AMBITIOUS, energetic, MANAGER Required to develop and expand a small building and decorating concern located Chislehurst area.—Apply, in writing, stating experience and salary required, to Box 5380, "The Builder."

ASSISTANT TO MANAGER. An excellent opportunity is offered to a young man by a firm of Builders and Decorators in the West End of London. A knowledge of estimating and preparing accounts for alterations, decorations and jobbing work is required.—Write stating age, experience and salary required, to Box 905, "The Builder."

DEPUTY CONTRACTS MANAGER. A public company, already well established in the industry, having recently formed a new general building unit within their organisation. Require a competent deputy for their Building Contracts Manager. The successful applicant must be experienced in all types of general building contracts and able to deal with the planning, scheduling and ordering of materials and placing of sub-contracts. I.O.B. qualification desirable; enthusiasm essential. Good opportunity for advancement in this expanding sphere of the company's activities.—Write, Box 5400, "The Builder."

CIRCULARS

A box number is a service designed to help the advertiser. It is NOT a medium for circularising. Circulars addressed to a box number will not under any circumstances be forwarded

BUILDER'S MANAGER

Age 30/55 required by Manchester Building Contractors to organise Building Contracts £20,000 to £250,000.

Salary £1,500/£1,750 plus Bonus

Transport provided. Assistance with housing if required. Age and full particulars in confidence to:

Box No. 5488, "The Builder"

CLERKS OF WORKS

CLERK OF WORKS/AGENT Required for private development, housing estate, Reading, and to assist on sales.—LAWSON & CO., 40 Brook-street, London, W.1. Tel: GRO 8446.

CLERK OF WORKS Required in July or earlier for large agricultural estate in South Scotland. Age 30-45. Previous experience essential. Supervision of direct labour and contractors.—Apply, with full details and copy references only, to the Factor, BUCCLEUCH ESTATES, Ltd., Irvine House, Canonbie, Dumfriesshire.

ASSISTANT CLERK OF WORKS Required for erection of Factory Buildings at Stevenage for a period of about 12 months. Successful candidate will be required to take a medical examination and comply with conditions of engagement laid down by the Stevenage Development Corporation.—Reply in writing giving age, salary and previous experience, to FARMER AND DARK, F/F.R.I.B.A., Romney House, Tufton-street, Westminster, S.W.1.

CLERK OF WORKS. experienced in multi-storey reinforced concrete and general building work. Required for the erection of flatlets and hostel at Hemel Hempstead, at an approximate value of £300,000.—Apply, in writing, to GOLLINS, MELVIN, WARD & PARTNERS, 15 Manchester-square, London, W.1, stating age, qualifications, present post and salary, previous contracts engaged upon and names and addresses of two referees. Salary by arrangement.

CLERK OF WORKS Required immediately for 14-storey r.c. luxury flats at Brighton. Contract approx. 18 months. Salary £1,300 plus £250 bonus. —Apply giving full details and names of two referees, to KENNETH ANNS & PARTNERS, 1 Lincoln's Inn Fields, London, W.C.2.

EXPERIENCED

CLERK OF WORKS

WANTED IMMEDIATELY

For the supervison of the erection of a new reinforced concrete office block for **MESSRS. SKETCHLEY LIMITED** at **HINCKLEY.**

Applications should be addressed to John H. D. Madin, Dip. Arch. Birm. A.R.I.B.A. 83/85, Hagley Road, Edgbaston, Birmingham, 16 and should include full details of previous experience. Salary in the region of £1,100 per annum according to experience.

BUYERS

WANTED immediately, ASSISTANT BUYER, with some experience, for Building and Civil Engineering firm. Good prospects, superannuation, five-day week.—Please write, stating age, experience and salary required, J. L. EVE CONSTRUCTION CO., 17 Hillside, Wimbledon, S.W.19.

EXPERIENCED BUILDERS' BUYER Required, able to prepare material schedules and progress delivery of same to site.—Telephone: Emberbrook 4945 for an immediate appointment.

EXPERIENCED BUYER Required by Civil Engineering and Building Contractors. A head office appointment, near Reading, Berkshire. Permanent post with good salary and pension rights, etc., offered to keen and energetic man.—Write in first instance giving details of experience, past employers, etc., and age, in confidence, to Box 5329, "The Builder."

BUYERS. Building company, with offices in N.W. London, and engaged mainly in housing contracts, Requires: (1) SENIOR ASSISTANT BUYER, fully experienced and able to work without supervision. (2) JUNIOR ASSISTANT, experience not essential; a fine opportunity for an intelligent young man.—Applications, with full details please, to Box 5397, "The Builder."

BUYING ASSISTANT Required aged 18/20. Experience of B.O.Q.'s essential and of Buying or Quantity Surveying preferable. Excellent opportunity.—Apply by letter to Chief Buyer, HOWARD FARROW, Ltd., Highfield-road, Golders Green-road, N.W.11.

EXPERIENCED BUYER

required for Contractors office. Surveyor trained preferred. Full details, including salary required, to:

Box No. 5328, "The Builder"

ASSISTANT REQUIRED

for

Buying Office of firm of National Contractors with Head Office in the Westminster area. Good prospects and pay. Pension Fund, etc. Write in first instance to:

Box No. 5476, "The Builder"

REPRESENTATIVES

EXECUTIVE APPOINTMENTS LIMITED
78 Wigmore Street, London, W.1.

An old-established and substantial British trading company in Nigeria seeks

TECHNICAL REPRESENTATIVE — Construction Equipment

Candidates 30-45 of at least grammar school educational standard must have sound civil engineering experience and be familiar with modern uses of steel scaffolding, shuttering, etc., and must be capable of designing and preparing drawings for new projects.

SALESMEN — Building Materials

Candidates 28-35 of good education must have had practical experience in the building industry and a successful record in selling to that industry.

All appointments offer a career in a virile and expanding organisation, starting salaries in the range £1,500–£2,000, pension, free furnished quarters, car and generous passage paid leave. Write briefly, indicating the position desired (WH. 108).

Please write briefly in strictest confidence to the Managing Director, quoting the reference number. No identities divulged without permission.

SPECIALIST REPRESENTATIVE. Vacancies exist in London and Birmingham for two Specialist Representatives to promote the sale of a new type of concrete anchor being imported from the U.S.A. Knowledge of concrete construction is essential together with the ability to carry out effective demonstrations. The positions offer great scope for advancement in an expanding company. Salary commensurate with experience and successful applicant will be admitted to the Group Pension scheme. Car provided or generous allowance if car owner —Applicants should send full details, in writing, to Managing Director, GREENHAM TOOL COMPANY, Ltd., 618 London-road, Isleworth, Middlesex.

ARCHITECTURE/BUILDING. A vacancy exists in the London Sales Office of a well-known company specialising in Building Materials. Applicants should be in 20/30 years age group, have good knowledge of building construction and be able to write a good letter.—Box 5467, "The Builder."

JUNIOR REPRESENTATIVE at our Sidcup branch. Experience heavy side Merchants' trade necessary. Car provided. Good salary and bright future for right man. Holiday booking honoured. Telephone for appointment.—HENRY J. GREENHAM (1929) Ltd. Shepherds Bush 1250.

AUSTINS OF EAST HAM LTD.

Assistant Representatives

Many young men who have gained experience in the Building Trade and who possess initiative and drive feel that their ambitions can only be satisfied by making selling their career.

An appointment for Surrey is now offered to such young men, age 23–26, to join the sales organisation of Austins of East Ham, selling Standard Wood Windows, Doors and Kitchen Units.

After initial training at Head Office suitable candidates will be given outside experience.

Apply to Sales Director,
2, Abbots Road, East Ham, London, E.6.
giving details of education and career.

BUILDERS' ASSISTANTS

ASSISTANT TO MANAGER of expanding Development Company Required, Surveyor trained. Age under 30 years. Apply stating age, experience, qualifications and present salary. Salary according to experience and ability. Superannuation scheme in operation.—Apply in writing to: M. J. JEANES (DEVELOPMENTS), Ltd., 62 Oak End Way, Gerrards Cross, Bucks.

MISCELLANEOUS

HANDY MAN for office. Suit pensioner. Five-day week. Good character and sound hearing essential. Light duties. Salary £25 per calendar month to commence.—Apply, in own hand, Room 207, No. 329 High Holborn, W.C.1.

AGENTS

AGENT/GENERAL FOREMAN Required. First-class opportunities for young man with initiative and drive. Opportunities of housing accommodation and top salary to right man.—Apply CLARK BROS., Stratton-road, Swindon, Wilts. Telephone: Swindon 3417.

BUILDING AGENT Required by old-established Birmingham Contractors, for site 5 miles North-West of Birmingham. Experienced man preferred but would consider enthusiastic and energetic young man having organising ability and wishing to gain site experience. Required for contract lasting at least two years and probably three but position could develop into a permanent one. Small flat near site could be made available if required.—Box 5390, "The Builder."

FIRST-CLASS AGENT Required with wide experience in Reinforced Concrete and Civil Engineering work. Top salary for the right man.—Write, stating age, experience, salary required, with copies of references, to Building Contracts Manager, H. C. JANES, Ltd., 183 High Town-road, Luton.

AGENT

required for attractive
Central London contract.

Multi-storey steel framed building, natural stone faced construction. Only first-class men with experience in this type of construction need apply in writing, stating age, experience and salary required to:

W. J. SIMMS SONS & COOKE LTD.,
Sherwood House,
Beddington Lane,
Croydon, Surrey.

AGENT

required for large Contract in Hendon area. Experience in reinforced concrete work essential. Excellent prospects for right man with this progressive Company.

Apply, with full details of age, qualifications and experience to:

The Secretary,
Tersons Ltd.,
Dollis Park, Finchley, N.3,
quoting reference A.V.

LAING

SENIOR AGENTS
REQUIRED FOR
THE LAING HOUSING COMPANY LIMITED

Applicants should be capable of supervising groups of Housing Estates, including Roads and Sewers, or alternatively single large-scale projects.

These vacancies offer excellent prospects of rapid advancement in an expanding organisation to men with wide knowledge and experience of the building trade and the ability to appreciate good craftsmanship. Posts are permanent and pensionable.

Apply stating age, experience and qualifications (in strict confidence) to:

Group Personnel Manager (JB.4),
John Laing & Son Ltd.,
London, N.W.7.

McMANUS & CO LTD.

require

AGENTS/GENERAL FOREMEN

for large private development schemes and housing estates in the Home Counties. The positions offered are progressive and carry a good salary. Write with full particulars to the Chief Surveyor,

McMANUS & CO. LTD.,
Orchard House,
Orchard Parade,
Potters Bar, Middx.

AGENTS AND GENERAL FOREMEN

Vacancies exist for senior and junior grades in the expanding Midland Branch of Wates Limited, Building and Civil Engineering Contractors. Permanent position, superannuation and bonus.

Applicants with experience and drive who wish to join a progressive organization with scope for advancement should apply giving full particulars to:—

The Manager,
WATES LIMITED,
94 Hagley Road,
Edgbaston, Birmingham 16.

FOREMEN AND SUPERVISORS

GENERAL FOREMAN Required for contracts Greater London area. Good prospects for first-class men with drive and initiative.—Full particulars, including salary, etc., to Box 916, "The Builder."

GENERAL FOREMAN Required, housing contracts, Alton and Newbury.—Apply, giving full particulars, DRURY CONSTRUCTION, Ltd., 4 Farncombe-road, Worthing.

GENERAL FOREMAN Required for flat development schemes in the North London area. Previous experience of a similar nature essential.—Telephone: FINchley 6271, W. REED & CO., Ltd., for appointment.

GENERAL FOREMAN Required for new school contract in Weybridge, Surrey. Must be capable of setting-out and running job from start to finish. Only men with drive and enthusiasm need apply. —Write stating age, experience and salary required, to MESSRS. E. & D. SIMMONS, Ltd., Britannia Works, Simplemarsh-road, Addlestone, Surrey.

ASSISTANT to General Foreman Required to fill permanent GENERAL FOREMAN'S post, after training, with contractors building residential property in the North London area. Applicants should have had craft experience in the industry and technical schooling.—Please apply, in writing, to MESSRS. DAY (CONTRACTORS), Ltd., 705 High-road, N.12, giving brief details of previous training, experience, age and salary expected.

FIRST-CLASS GENERAL FOREMAN Required, capable of handling contracts between £50,000 and £150,000, mostly in the East London and S.W. Essex areas.—Apply giving full details, including salary required, to Mr. G. Marney, MESSRS. A. E. SYMES, Ltd., Albert House, 236 High-street, Stratford, E.15.

SENIOR GENERAL FOREMEN Required by National Contractor for contracts situated in London and South of England. Applicants must be experienced in reinforced concrete construction. Only keen and ambitious foremen capable of earning good annual bonus by results need apply. Good conditions and pension scheme operating.—Apply in writing, giving details of experience to date, to Box 5269, "The Builder."

FIRST-CLASS GENERAL FOREMAN Required for large building contract in the Herefordshire area. —Apply stating age, experience and previous employers, to Box 1038, c/o MURRAY & PHELAN, Ltd., Columbia House, Aldwych, W.C.2.

FIRST-CLASS GENERAL FOREMAN Required for large building contract in the Oxfordshire area.—Apply stating age, experience and previous employers, to Box 1039, c/o MURRAY & PHELAN, Ltd., Columbia House, Aldwych, W.C.2.

GENERAL FOREMAN Required for office block development in West London. Good rates of pay and vehicle provided.—Apply in writing, J. A. STIRLING, Ltd., Fretherne Chambers, Welwyn Garden City, Herts.

GENERAL FOREMAN Required for large housing estate in the Stoke-on-Trent area. Permanent position for a keen, energetic man. Interviews can be arranged in either London or Stoke-on-Trent.—Write Mr. Moot, PERCY BILTON Ltd., 54-58 Uxbridge-road, London, W.5.

GENERAL FOREMAN is Required for supervising finishing trades on speculative housing site in Newport, Mon. This situation is suitable for a young man and is permanent and pensionable.—Apply, in writing, to Building Manager, DAVIS CONTRACTORS, Ltd., 346/350 Kilburn High-road, N.W.6.

TAYLOR WOODROW (OVERSEAS) LIMITED

require

PRODUCTION FOREMEN
QUARRY FOREMEN

for Civil Engineering work on Dam Project in West Africa.

Apply in writing to:—

Personnel Manager,
Taylor Woodrow (Overseas) Ltd.
Western House, Western Avenue, Ealing, W.5.
quoting ref: PF/QF/TWO/K6746

BUILDING GENERAL FOREMEN
COVENTRY

W. H. Jones & Son, a Company in the Richard Costain Group, have vacancies for General Foremen on contracts within daily travelling distance of Coventry.

Candidates must have had experience in complete charge of contracts and have the ability to prepare programmes and weekly plans.

Interviews will be arranged in Coventry or London if it is more convenient for candidates.

Applications should be addressed to:

Personnel Manager,
111, Westminster Bridge Road,
London, S.E.1.

THE LYON GROUP

REQUIRE

AREA SUPERVISORS

capable of taking complete charge of a group of industrial, commercial and residential developments and contracts, including multi-storey structures in reinforced concrete. These positions will be well paid and offer great opportunities of advancement with an expanding Group for determined and capable men.
Apply:—

Managing Director,
Ronald Lyon Construction Limited,
Auckland House, New Zealand Avenue,
Walton-on-Thames, Surrey.

BUILDERS' GENERAL FOREMAN

Required for building contract Isle of Grain. Must be experienced in all trades, including reinforced concrete, and have drive and initiative. Required start immediately. Write giving full particulars:—

J. H. DURRANT & SON LTD.
282 High Street,
Rochester, Kent.

GENERAL FOREMAN

required or Oxford area, speculative building site. Must be experienced in dealing with sub-contractors and obtaining high class finish. Salary with bonus up to £1,300. House available if required. Position permanent if suitable. Apply in writing stating age and experience to

Box No. 5401 "The Builder"

TAYLOR WOODROW (OVERSEAS) LIMITED

require

GENERAL FOREMEN

for Building and Civil Engineering work. Applicants should be time served Carpenters and Joiners with supervisory experience overseas.

Apply in writing to:—

Personnel Manager,
Taylor Woodrow (Overseas) Limited,
Western House, Western Avenue, Ealing, W.5.
quoting ref: GF(B)/TWO/K6745

W. J. WHITTALL & SON LIMITED

Birmingham & London have vacancies for

GENERAL FOREMEN

on contracts in the West and North-West London Area, who have sound constructional knowledge and are experienced in the speedy erection of industrial and other buildings.

The posts carry good salaries commensurate with abilities and a pension scheme is in operation.

Interviews can be arranged either in London or Birmingham, but initial written application enclosed in an envelope marked "General Foreman" should give details of age, training and career to:

W. J. WHITTALL & SON LIMITED

Builders & Civil Engineers,
Ernest Gardens, Thames Road,
London, W.4.

An expanding department within a large firm of Building Contractors

requires

FOREMEN

for work on Reinforced Concrete structures in the London area.

Opportunities exist for enterprising men of experience, and permanent positions are offered with a salary of £20 per week together with additional incentives.

Apply stating age, previous experience, etc., to:

Box No. 5296, "The Builder"

FOREMEN

TROLLOPE & COLLS LIMITED

have vacancies in their Reinforced Concrete Department for experienced FOREMEN.

Permanent posts are offered to the right men, with good salaries and considerable future prospects.

Applications, giving fullest particulars of past experience, should be addressed to:

The Assistant Secretary,
Trollope & Colls Ltd.,
1, Noble Street,
Gresham Street, London, E.C.2.

WORKING FOREMAN

for medium-size shop/flat contract
Ashford, Kent.
Good Salary and prospects.
Apply full details to
Box 5381 "The Builder"

LABOUR CONTROLLER

London Firm of Builders having a Labour force of 500 men seeks to fill a newly created position as Personnel Manager. We are trying to strengthen our efforts in the development of leaders and key personnel among our operatives.

A knowledge of building trade labour, conditions of employment, educational and training schemes and job assessment qualities of a high order are pre-requisites for the position.

Applicants should be aged 30-35. Commencing salary £1,000 p.a. The position entitles the successful applicant to participate in a non-contributory Pension Scheme. Please reply to

Box No. 5386 "The Builder."

WALTER LILLY AND CO., LTD.
(Member of the Lovell Group)

require

BUILDING GENERAL FOREMEN

For interesting and varied contracts in London and the Home Counties.

Applicants must have experience in contracts up to £200,000 with sound knowledge of modern construction and methods.

Apply with particulars of age, experience and salary required to:—

8, St. ANN'S Street,
S.W.1.

SENIOR GENERAL FOREMAN

required for large flats contracts. Initailly N.E. London area.

Applicants must have proven record in this field, with ability and drive to command top salary.

Permanent and Pensionable position.

Write with full details, to:—

WARD AND PATERSON, LIMITED,
7, Welbeck Street, London, W.1.

WEMBLEY CONSTRUCTIONS LTD.

require

GENERAL FOREMAN

for Housing Contract in
West Middlesex

Good salary and bonus paid to the right man. Reply stating age, experience and salary required to:—

Contracts Manager,
80, Sunleigh Road,
Alperton, Middlesex

WRAIGHT LTD.,

Member of the R. D. Hope, Gibson, Kimber Group of Builders,

require at their works
23 LONDON ROAD,
SITTINGBOURNE
(Phone 2266/7/8)

A BUILDING SUPERVISOR, BRICKLAYERS, CARPENTERS and JOINERS

for varied and interesting general building and contracting work. Excellent prospects to progress with this expanding group of companies.

THOMAS LOWE & SONS LTD.

have vacancies for

GENERAL FOREMEN

to take charge of contracts in the Birmingham Area up to a value of £200,000. Must be experienced and conversant with modern methods including planning and progressing. Staff Pension Scheme available after satisfactory probationary period. Applications should be, in the first place, in writing to:

Gazette Buildings,
Corporation Street, Birmingham 4,

stage age, qualifications and salary required.

IMMEDIATELY REQUIRED

GENERAL FOREMEN

J. M. HILL & SONS LTD.
LARGE LONDON CONTRACTS
ONLY FULLY EXPERIENCED MEN
NEED APPLY.
STAFF POSITION.
PENSION SCHEME
APPLY IN CONFIDENCE
SALARY £1,450

Heather Park Drive,
North Circular Road,
Wembley, Middx.

GENERAL FOREMEN

required for contracts in London, Sussex and Kent. Experienced in all types of contracts from £100,000 to £500,000. Salary £1,200 upwards according to experience. Pension scheme and assistance with housing after proving period.

W. LLEWELLYN & SONS LTD.
79 DAVIES ST., W.1.

GENERAL FOREMEN

required for large Contracts in North West London. Experience in reinforced concrete work essential. Good prospects for right men, with excellent initial salaries.

Apply, with full details of age, qualifications and experience to:

The Secretary,
Tersons Ltd.,
Dollis Park, Finchley, N.3,

quoting reference A.V.

GENERAL FOREMAN. Experienced man Required for speculative housing site at Swansea. Able to work to a schedule programme and able to ensure good quality workmanship. This situation is permanent and pensionable.—Apply, in writing, to Building Manager, DAVIS CONTRACTORS, Ltd., 346/350 Kilburn High-road, London, N.W.6.

OUTSIDE SUPERVISOR Required by old-established Midland Builders to organise and develop the outside organisation. Contracts cover major flat, school, hospital, factory and housing schemes. A tradesman background is required and the post is progressive and pensionable.—Apply, stating brief particulars of age, experience, to Box 5376, "The Builder."

EXPERIENCED, energetic, walking FOREMAN, to supervise small works for old-established London Building Contractors. Applicants must have had previous experience of this type of work, and should be capable of maintaining discipline and economical control of labour.—Apply, in confidence, to the Secretary, giving full details of experience, and when available, to Box 5387, "The Builder."

GENERAL FOREMAN Required for Essex area. Work up to £18,000.—Apply, stating age, previous experience, salary required, to Box 5462, "The Builder."

THE MIDDLESEX HOSPITAL, W.1. Applications invited for post of BUILDING SUPERVISOR. Duties include planning and supervising building maintenance work, preparing contracts and specifications. Ordinary National Certificate or comparable qualifications desirable. Salary £905 x £25(3) x £30(2)—£1,040 plus London Weighting.—Applications in writing to Secretary-Superintendent by 23rd May.

PLUMBING SUPERVISOR. Man of loyalty, integrity and drive, with eventual promotion to the Board, envisaged for suitable applicant. Commencing salary approximately £1,000.—Box 5450, "The Builder."

GENERAL FOREMAN Required for Broadstairs contract. Fully experienced man.—Applications, in detail, to Box 5483, "The Builder."

WORKING FOREMAN CARPENTER needed in near future for development in Broadstairs.—Full details to Box 5484, "The Builder."

N. HERTS.—S. CAMBS. AREA

GENERAL FOREMAN

for private housing estates & general contracting. Old established firm. Good salary and prospects to right man.

Box No. 5439, "The Builder"

GENERAL FOREMAN

required for Estate Development in Slough area. Fully experienced man. Full details to:

Sloggetts (Contractors) Ltd.,
209 High Street,
Hampton Hill, Middlesex

GENERAL FOREMAN

REQUIRED IMMEDIATELY FOR £80,000 CITY CONTRACT. GOOD SALARY AND BONUS OFFERED FOR SUCCESSFUL COMPLETION OF CONTRACT. EXPERIENCE ON SITE ORGANIZATION AND R.C. FRAMED STRUCTURE.

BOX No. 917, "THE BUILDER"

WILLIAM COWLIN & SON, LTD.

Require

first-class

GENERAL FOREMAN

to be based in Bristol area. Must be capable of controlling a large building contract and co-ordinating all specialist sub-trades. Knowledge of reinforced concrete and heavy foundation work essential. Position is permanent and pensionable.—Apply, stating age, previous experience and salary required, to **Stratton-street, Bristol 2.**

GENERAL FOREMAN urgently Required for contracts in Greater London area and Guildford. R.C. framed buildings, factories and conversions. Average value of each contract is £50,000. Top salaries will be paid to top men in this class of work. Excellent bonuses are attainable by men of real ability and drive.—Apply in writing now to MESSRS. COURTNEY & FAIRBAIRN, Ltd., 377 Albany-road, Camberwell, S.E.5.

GENERAL FOREMAN Required for contracts in London and Maidstone, Kent.—Apply RICHARDSON, Herbert House, Slade Green, Erith, Kent.

GENERAL FOREMAN Required for building contractor in this area, competent and experienced in handling all trades and sub-contractors.—Write, giving details and salary required, to J. ANDERSON & SONS (BUILDING CONTRACTORS), Ltd., Boundary-place, Sevenoaks-road, Orpington, Kent.

GENERAL FOREMEN for large contracts in London and Home Counties with expanding and progressive contractors. Top salaries, incentive and pension scheme for men able to run planned contracts strictly to programme.—Write, with full details, to Box 5398, "The Builder."

A. T. CHOWN & CO., Ltd. Require GENERAL FOREMEN for new major contracts in London area. The prospects are excellent for men able to run planned contracts on time. The position carries top salary with added incentive and pension benefits.—Apply, with full particulars, to 1 Cromwell-road, S.W.7.

WORKING GENERAL FOREMAN Required for progressive Building company, for good-class houses near Ascot, preferably Carpenter and Joiner by trade.—'Phone: Byfleet 41072, after 7 p.m.

BUILDING SUPERVISOR, or experienced GENERAL FOREMAN Required, to run and supervise from day to day, all types of building work, including public works, factory and office additions and conversions generally.—Apply, in writing, to WALLIS & STANLEY, Ltd., 258 Archway-road, Highgate, N.6, stating experience and salary required.

GENERAL FOREMAN Required for supervision of small works. Car owner.—Apply stating age, experience and salary required, to Box 935, "The Builder."

GENERAL FOREMAN Required for estate work. Must be competent man.—Please write in first instance, stating age, experience and salary required, to Box 5293, "The Builder."

GENERAL FOREMAN, fully experienced, for contracts up to £45,000. Permanent position to right applicant.—SOOLE & SON, Ltd., Dunstable-road, Richmond, Surrey. RIC 0038.

CARPENTERS AND JOINERS

JOINER with thorough knowledge of the trade required to take charge of small, newly equipped with modern machines, Joiners' shop for medium-size Contractors. Knowledge of estimating an advantage.—Write stating age, experience and salary to Box 927, "The Builder."

CHARGEHAND BRICKLAYERS AND CARPENTERS

required for small high-grade jobs in and around London. Experience of good-class work essential. Good pay and prospects.

Please write to:

Box No. 5481, "The Builder"

CLERKS

BUILDERS' ORDER/COST CLERK Required immediately. Permanent position with established firm, at salary commensurate with experience offered.—H. J. & A. WRIGHT, Ltd., Great Missenden, Bucks.

BUILDER'S COST CLERK. State age, experience and salary required.—C. NEAL & SON, Ltd., West Horsley, Surrey. (Tel.: East Horsley 4255/56.)

BUILDER'S CLERK Required by Surveyors for supervision of maintenance, repairs, etc.—Apply in writing BASIL & HOWARD SAMUEL, 97 Mortimer-street, W.1.

ORDER CLERK at Head Office, Shepherds Bush. Work very interesting, mainly heavy side materials. Permanent position with pension benefits. Holiday bookings accepted. Salary according age and experience.—Apply HENRY J. GREENHAM (1929) Ltd., B.R. Goods Depot, Sterne-street, Shepherds Bush, London, W.12. Telephone: Shepherds Bush 1250.

SITE CASHIERS/WAGES CLERKS Required. Experienced in Building and Civil Engineering trade. Willing to live away from home if required. Good salary plus lodging allowance.—Apply LAVENDER, McMILLAN (CNTRS.), Ltd., 54 Cheam Common-road, Worcester-park, Surrey.

WAGES CLERK for average 150 men.—Telephone Mr. Alderslade, HAM 7421 for appointment, CRAMB & DEAN Ltd., 104 Belsize-lane, N.W.3.

WAGES and COSTING CLERK (Male) Required, with knowledge of Bookkeeping for Plastering Contractors in South West London, employing 80 to 100 men.—Write, stating age, experience and salary required, to Box 5404, "The Builder."

SALES OFFICE ASSISTANT/ORDER CLERK Required by head office of Builders' Merchants. Some knowledge of facing brick trade an advantage.—Write, stating age, experience and salary required, to Box 913, "The Builder."

EXPERIENCED BOOK-KEEPER Required to take charge of bought ledger.—Apply, giving full details, references, age and salary expected, to E. C. H., Albion Works, Wokingham, Berks.

WAGES (experienced) and COSTING CLERK (male) take charge small department Heating and Ventilating Company in Holloway. Permanent, interesting position.—'Phone NORth 4875 Ext. 35.

SITE CASHIER. Applications invited for the above position for vacancy in Midlands area. The position is one of much responsibility and calls for a fully-experienced man previously holding similar position with national contractor on large contracts and has been covered by fidelity insurance. Must be reasonably mobile. Good terms and conditions offered to suitable man. Age range about 28 to 46 years.—Apply, in confidence, to WILSON LOVATT & SONS, Ltd., Clarence-street, Wolverhampton.

COST CLERK Required for medium-size West End office, able to prepare small accounts.—Apply in writing stating age and salary required, to Box 966, "The Builder."

COSTING CLERK Required with experience in wages, P.A.Y.E., etc., for medium-sized Builder's office in London.—Write stating age, experience, etc., to Box 5459, "The Builder."

BONUS and COST CLERK Required with at least 2/3 years' experience of builders' bonus and costing systems to run section under supervision for medium-sized building and Civil Engineering Contractors. Good salary, staff pension scheme and holiday this year.—Apply CONTRACTORS (MANCHESTER), Ltd., Greg-street, Reddish, Stockport.

CAPABLE ACCOUNTS/COST CLERK Required by London Building and Civil Engineering Contractors for specialized works section, able to prepare and price detailed daywork sheets also prepare and render accounts. Permanent position. Staff pension scheme.—Write giving details of age, experience and salary required, to Box 5455, "The Builder."

CLERK Required for Chartered Quantity Surveyor's London office. Five-day week, pension scheme. Write giving age, experience and salary required.—Box 5470, "The Builder."

COPY TYPIST Required for Chartered Quantity Surveyors, Waterloo area. Five-day week. Write giving age, experience and salary required.—Box 5473, "The Builder."

SITE CASHIERS Required. Experience building and civil engineering contracts; one for Chester/Winsford area, one based head office for holiday and other reliefs. Staff pension scheme available, subsistence allowance paid when away from home.—Apply, in writing, with details of experience, age and salary expected, to LAYCOCK, Banner Cross Hall, Sheffield, 11.

HORSLEY, SMITH & CO. (Hayes) Ltd.

Flooring Contractors

require

EXPERIENCED CLERK

An interesting and progressive position offering an attractive salary to a man of sound commercial experience. Benefits include Staff Pension Scheme after qualifying period, 5 day week, canteen facilities, holiday entitlement increasing with service. 1961 holiday arrangements will be respected. Applications in writing please to:—

The Secretary,
HORSLEY, SMITH & Co.
(HAYES) Ltd.,
Hayes, Middlesex,

stating age, experience and salary required.

a25

TAYLOR WOODROW (OVERSEAS) LIMITED

require

GENERAL FOREMEN

for housing scheme in Ghana. Applicants must have wide supervisory experience overseas on similar projects.

Apply in writing to:—

Personnel Manager,
Taylor Woodrow (Overseas) Limited
Western House, Western Avenue, Ealing, W.5.
quoting ref: GF/TWO/K6747

OVERSEAS APPOINTMENTS

Prepaid rate, 24 words, 8/6; additional 6 words, 2/-. Box number, Including Forwarding Replies, 2/-.

QUANTITY SURVEYORS Require qualified men for offices in Sydney and Perth, Australia.—Write, stating age, experience and salary required, Box 619, "The Builder."

KUWAITI CONTRACTOR wishes to engage a competent SURVEYOR versed in Quantities, Pricing, Claims and Negotiating; Middle East experience an advantage. Contract for one year in Kuwait in first instance renewable mutually; usual conditions for service abroad; married accommodation available. Interview in London.—Box 5166, "The Builder."

TAKERS-OFF AUSTRALIA, SYDNEY AND MELBOURNE

Experienced Takers-Off required for three-year contracts, £A1,900, £A2,000, £A2,100 plus considerable overtime at time-and-a-half, bonus on completion of contract. Fares to Australia paid. Perfect working conditions. Extra holidays. Continuation contract may be obtained.

Box No. 5289, "The Builder"

OPPORTUNITIES exist with a British Company for single young men aged 21 to 24 years to be trained for responsible positions in Commonwealth West Africa. Applicants must have a good G.C.E. "O" level, be resourceful, ambitious, and have a flair for Salesmanship. Building materials experience an advantage. Positions offer an interesting career. Commencing salary £1,000 per annum. Overseas terms of service include air/sea passages, free medical attention, furnished accommodation at nominal rent, initial kit allowance, contributory pension scheme. Leave on full pay following tours of 18/24 months.—Apply in confidence, giving full details, to Box 5426, "The Builder."

SERVICES OFFERED

Minimum 8s. 6d. (24 words)
Each additional 6 words 2s. Box number, Including Forwarding Replies, 2s.

CONTRACTOR'S ESTIMATES. Building and Civil Engineering; competitive prices at current rates. Alterations our speciality.—AMALGAMATED BUILDING SERVICES, 170 Bridge-road, Chessington. 'Phone: Epsom 4255.

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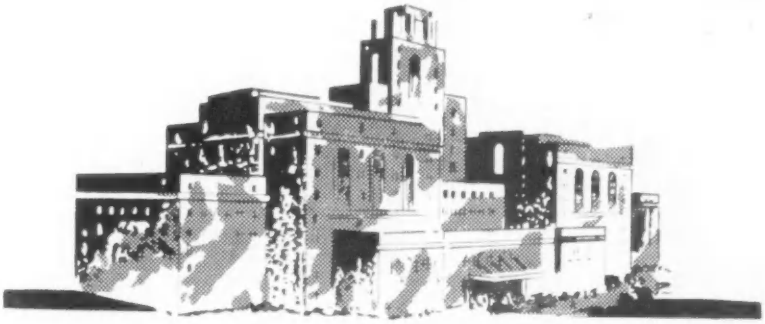

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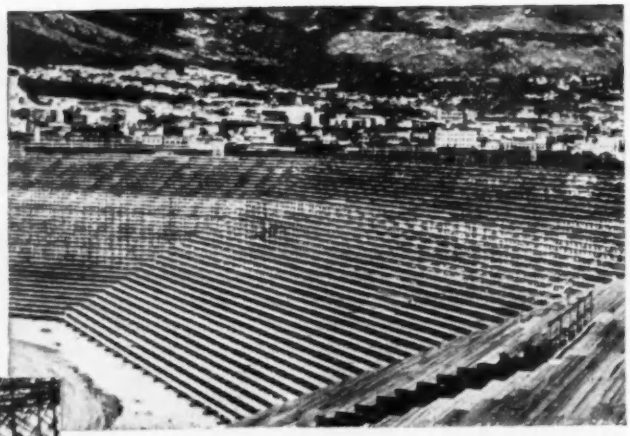

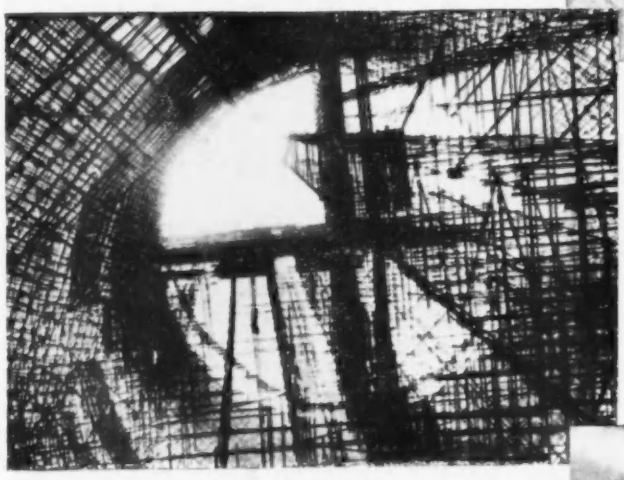

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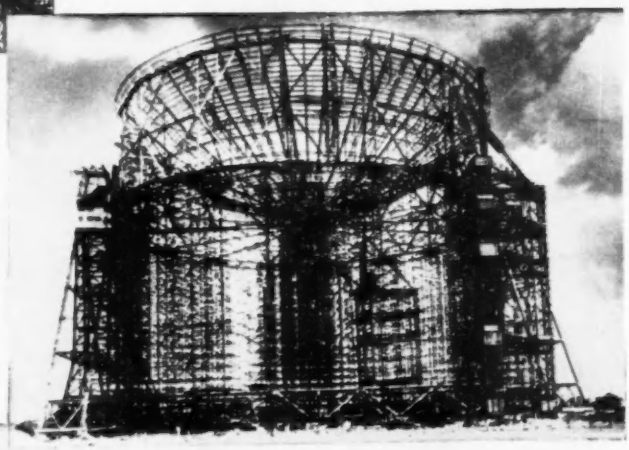

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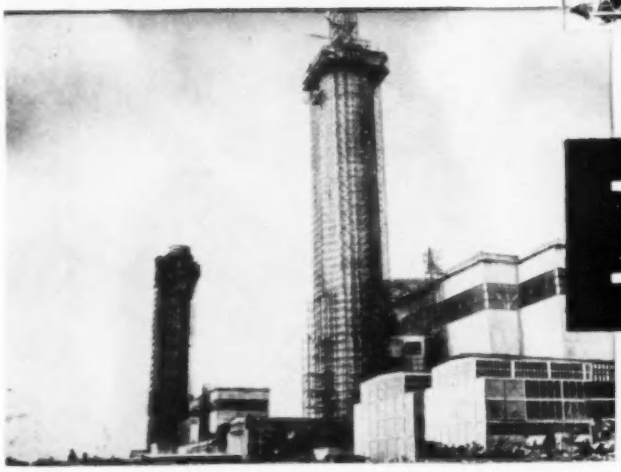

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